

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Acceleration of Broadband Deployment by)	WT Docket No. 13-238
Improving Wireless Facilities Siting Policies)	
)	
Acceleration of Broadband Deployment:)	WC Docket No. 11-59
Expanding the Reach and Reducing the Cost of)	
Broadband Deployment by Improving Policies)	
Regarding Public Rights of Way and Wireless)	
Facilities Siting)	
)	
Amendment of Parts 1 and 17 of the)	RM-11688 (terminated)
Commission's Rules Regarding Public Notice)	
Procedures for Processing Antenna Structure)	
Registration Applications for Certain)	
Temporary Towers)	
)	
2012 Biennial Review of)	WT Docket No. 13-32
Telecommunications Regulations)	

**COMMENTS OF THE CITY OF ALEXANDRIA, VIRGINIA; THE CITY OF
ARLINGTON, TEXAS; THE CITY OF BELLEVUE, WASHINGTON; THE CITY OF
BOSTON, MASSACHUSETTS; THE CITY OF DAVIS, CALIFORNIA; THE CITY OF
LOS ANGELES, CALIFORNIA; LOS ANGELES COUNTY, CALIFORNIA; THE CITY
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CITY OF TALLAHASSEE, FLORIDA; THE TEXAS COALITION OF CITIES FOR
UTILITY ISSUES; THE GEORGIA MUNICIPAL ASSOCIATION; THE
INTERNATIONAL MUNICIPAL LAWYERS ASSOCIATION; AND
THE AMERICAN PLANNING ASSOCIATION**

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SUMMARY

The Commission seeks to use this proceeding to explore avenues to promote infrastructure deployment, to provide the public advanced broadband services, and to protect the public interest. The local governments and affiliated organizations filing these comments share the Commission's goals. Our communities want and need robust broadband services. And we understand that this will occur only if an increasing number of facilities can be placed in our communities—sometimes in places that present siting challenges. Local governments confront these hard questions nearly every day. Through this experience, we have come to understand that the answer is not wireless-facility deployment at all costs—deployment that tramples on community values or threatens public safety. The answer is *sensible* deployment. In these comments, we answer the Commission's important questions about Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012, and we urge the Commission (and industry) to work with local governments to facilitate the *sensible* broadband deployment that we all desire.

Section 6409(a) is best understood to establish a workable framework for modification of a particular class of wireless facilities. Local governments *want* wireless-facility deployment, and collocation is often their preferred means of obtaining it. And local governments seek to resolve issues cooperatively and without extended disputes. The Commission should therefore use this proceeding not to establish a framework for later litigation or regulatory battles, but to emphasize and encourage local government-industry cooperation. We believe that the best way to do this is for the Commission *not* to adopt rules now. The Commission should instead clarify its guidance, and endorse mechanisms that foster the development of best practices.

If the Commission nevertheless believes that it needs to adopt formal Section 6409(a) rules immediately, it must significantly revise the proposed rules attached to the NPRM. In their current form, the proposed rules, read literally, would lead to a wide range of serious problems in local communities that it is impossible to believe Congress could have intended. Among other things, the proposed rules would improperly extend Section 6409(a)’s preemptive reach not just to modifications to a “wireless tower” or “base station” but to a range of other facilities that Section 6409(a) does not address at all. The proposed rules would also not evaluate a change to an existing facility in context—based on whether it changes a facility’s dimensions in important ways—but based on an absolute, purely quantitative test that ignores critical local circumstances. The proposed rules are also silent on whether critical local conditions remain enforceable, including those that protect public safety, the environment, and historically significant sites. Because of these inherent risks, the proposed rules would put considerable pressure on local governments *to deny* initial wireless towers and base stations—the last thing that local governments want to do.

The Commission should instead, *inter alia*:

- Recognize that Section 6409(a) does not affect local authority to, *inter alia*, protect public safety, safeguard the environment, or preserve historic sites; nor does it prevent a local government from establishing and enforcing conditions on the grant of an application (such as a condition that, post-modification, a stealth facility must remain a stealth facility);
- Recognize that the term “substantially change the physical dimensions” must consider context; an insubstantial change to a 150-foot tower might be a very substantial alteration to a small facility in a residential neighborhood;

- Define “wireless tower” and “base station” consistent with their common meaning – and in particular, the Commission should not define “base station” to include a structure that supports it; and
- Leave enforcement of Section 6409(a) to the courts.

The Commission also asks whether it should modify its existing rules implementing Section 332(c)(7) of the Communications Act.¹ It should not. There is no need for these changes, and the Commission lacks authority to adopt at least one of the rules—the “deemed granted” remedy—that it proposes.

The Commission asks whether it should expand existing categorical exemptions under 47 C.F.R. §§ 1.1306-1.1307 to eliminate the obligation to file an Environmental Assessment for a project that involves the “the mounting of antenna(s) and associated equipment on an existing building, antenna tower, or other structure, or inside an existing building.” This depends in part on how the Commission interprets Section 6409(a). Under the current regime, the Commission may be able to adopt broader environmental-processing exemptions, because state and local governments are reviewing and addressing many problematic projects. But if the Commission were to read Section 6409(a) to broadly preempt local review of modification requests that present environmental and historical concerns, it would be up to the Commission to protect historical structures and environmentally sensitive areas. This would likely require the Commission to narrow, not expand, its exemptions. The Commission would also need to assume a much more significant workload. The Commission can avoid many of these problems by adopting a reasonable approach to Section 6409(a).

¹ 47 U.S.C. § 332(c)(7).

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The above-named local governments and municipal and non-profit organizations² file

² The Georgia Municipal Association ("GMA") is a voluntary, non-profit organization that provides legislative advocacy, educational, employee benefit and technical consulting services to its members, which include over 500 Georgia municipalities. GMA is the only state organization that represents municipal governments in Georgia. The Texas Coalition of Cities for Utility Issues ("TCCFUI") is a coalition of more than 110 Texas cities dedicated to protecting and supporting the interests of the citizens and cities of Texas on utility-related issues that arise before the Texas Legislature, Public Utility Commission, Rail Road Commission, and the

these comments in response to the Commission’s Notice of Proposed Rulemaking in this matter.³ Like the Commission, we are committed to fostering broadband deployment, including through collocation and other modifications to wireless towers and base stations. We also applaud the Commission for the breadth, thoroughness, and reasonableness of the NPRM’s questions about Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012.⁴ The answers lead to an important conclusion: that if Section 6409(a) were applied unreasonably and without necessary context, it would jeopardize public safety, disrupt environmentally and historically sensitive areas, and undermine the essential planning and land-use measures that define and distinguish our communities. This would frustrate, not further, the broadband deployment that we all desire.

Fortunately, Section 6409(a) does not require this result. The statute can be read to establish a reasonable and workable framework for wireless-facility modification—one that the Commission should endorse here. The Commission should emphasize and encourage local

Federal Communications Commission. The International Municipal Lawyers Association (“IMLA”) is a non-profit, professional organization based in the Washington D.C. area, that serves as an advocate and valuable legal resource for local government attorneys. IMLA has more than 1,400 members across the United States and Canada. The American Planning Association (“APA”) is a nonprofit public interest and research organization founded in 1978 exclusively for charitable, educational, literary, and scientific research purposes to advance the art and science of planning—including physical, economic, and community planning—at the local, regional, state, and national levels. The APA’s mission is to encourage planning that will contribute to the public’s well being today, as well as to the well being of future generations, by developing sustainable and healthy communities and environments. The APA has 47 regional chapters and represents approximately 40,000 professional planners, planning commissioners, and citizens involved with urban and rural planning issues, nationwide.

³ Notice of Proposed Rulemaking, WT 13-238, WC 11-59, RM 11688 (terminated), WT 13-32, FCC 13-122 (Sept. 26, 2013) (“NPRM”).

⁴ Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. 112-96, H.R. 3630, 126 Stat. 156 (enacted Feb. 22, 2012), codified at 47 U.S.C. § 1455(a).

government-industry best practices, and clarify that it will regulate only if the industry and local governments cannot reach consensus on a particular issue.⁵ That should be rare. Local governments *want* wireless-facility deployment, and collocation is often their preferred means of obtaining it. Like the industry, local governments seek to avoid litigation and regulatory disputes: resolving issues collaboratively is in everyone's interest. A best-practices approach would also afford flexibility that a federal regulatory regime cannot. For example, Section 6409(a) is perfectly suited for a local government and a provider to agree at the time that the local government approves the *initial* wireless tower or base station about what facilities may be added to it automatically later. This would streamline later modifications, prevent disruptions, and avoid litigation. The Commission should endorse this "approve-once" approach, and consider hosting forums to facilitate ongoing discussions about this and other successful practices.

If the Commission believes that it needs to adopt formal Section 6409(a) rules immediately, the rules must be reasonable and workable. As we explain, the proposed rules at Appendix A are neither reasonable nor workable, and they are unclear on basic points, including, for example, whether they apply if a modification raises safety issues. Congress could not have intended this. We offer the Commission a revised approach that is consistent with Congress's intent.

The Commission also asks commenters to address three other issues.

First, the Commission asks whether it should modify its existing rules implementing Section 332(c)(7) of the Communications Act.⁶ It should not. No change is justified, and the

⁵ NPRM ¶ 98.

⁶ 47 U.S.C. § 332(c)(7).

Commission lacks authority to adopt at least one of the rules—the “deemed granted” remedy—that it proposes.

Second, the Commission asks whether it should expand existing categorical exemptions under 47 C.F.R. §§ 1.1306-1.1307 to eliminate the obligation to file an Environmental Assessment for a project that involves the “the mounting of antenna(s) and associated equipment on an existing building, antenna tower, or other structure, or inside an existing building.” This depends in part on how the Commission interprets Section 6409(a). The Commission has a responsibility under the National Historic Preservation Act to “take into account the likelihood and potential magnitude of effects in categories of situations.”⁷ Under the current regime, the Commission may be able to adopt broader environmental-processing exemptions, because state and local governments are reviewing and addressing many problematic projects. But if the Commission were to read Section 6409(a) to broadly preempt local review of modification requests that present environmental and historical concerns, it would be up to the Commission to protect historical structures and environmentally sensitive areas. Under those circumstances, the Commission may need to narrow, not expand, its exemptions. The Commission would also need to assume a much more significant workload, because *every* local historic or environmental concern could be addressed only through the comment procedure under 47 C.F.R. § 1.1307(c). The Commission can avoid many of these problems by adopting a reasonable approach to Section 6409(a).

⁷ *In re Nationwide Programmatic Agreement Regarding the Section 106 National Historic Preservation Act Review Process*, 20 FCC Rcd. 1073, ¶ 21 (2004).

Finally, the Commission proposes rules for placement of temporary antennas. Generally, temporary antenna placement issues that are not addressed by the agency’s rules directly can be adequately addressed at the local level.

I. THE COMMISSION SHOULD ENDORSE A FRAMEWORK FOR SECTION 6409(A) ROOTED IN BEST PRACTICES.

Stressing that it does not seek to “operate as a national zoning board,” but only to “appropriately address the traditional responsibility of State and local governments for land use matters,” the Commission asks whether it should regulate under Section 6409(a) comprehensively, or instead rely primarily on the industry and local governments to develop best practices.⁸ The Commission should do the latter. Local governments are successfully working with industry to encourage and streamline deployment, and this often leads to creative facility-placement solutions in areas that would otherwise present concerns. A federal regulatory regime could undermine this: many creative, collaborative efforts could not proceed if a local government’s conditions on initial facilities were rendered unenforceable. Moreover, local governments review modification requests for a range of considerations that a federal regime could not address. Therefore, at this point, we believe that the Commission can best advance Section 6409(a)’s goals—and deployment more generally—not by adopting formal rules but by:

- *Encouraging* local governments and industry to develop best practices;
- *Ensuring* that conditions on approval adopted during this period are respected; and
- *Revising* the Wireless Telecommunication Bureau’s Guidance to clarify, among other things, that modification requests under Section 6409(a) must be evaluated in the context

⁸ NPRM ¶ 99.

of circumstances specific to the wireless tower or base station that the request would modify.

A. Local Governments Are Successfully Encouraging Deployment and Experimenting with Approaches to Streamline It.

Local governments strongly support additional wireless broadband deployment in their communities and are working to make it easier. As the Commission recognizes, “[c]ollocation is . . . commonly encouraged by zoning authorities to reduce the number of new communications towers.”⁹ Many local ordinances require collocation where it is feasible and consistent with design limitations.¹⁰ In California, for projects that have received environmental clearance, a provider can identify a facility as a “collocation facility,” require the local government to identify the changes that it will subsequently allow to that facility, and then later modify the facility to replace, modify, or collocate equipment consistent with the local government’s initial decision.¹¹ The law effectively permits a single discretionary review up front that allows later changes within the initially established limits.

These local best practices work. For example, in the past five years, San Jose, California, has approved well over 400 modification requests. Since 2003, Montgomery County, Maryland, has received over 500 collocation applications, and its Telecommunications Transmission Facilities Coordinating Group has recommended approval of 94% of them. These practices will continue for a simple reason: local governments *want* robust wireless services in their communities.

⁹ NPRM ¶ 95.

¹⁰ *See, e.g.*, Montgomery County Zoning Code § 59-A-6.12. 59-A-6.14, 59-G-2-58. *See also* Montgomery County Code § 2-58E.

¹¹ Cal. Gov’t Code § 65850.6; *see* NPRM ¶ 127, n.260.

Local governments are not only encouraging collocation. They are also strongly supporting the deployment of small cell and Distributed Antenna Systems (“DAS”)—when proposed in a reasonable way. In some cases, local governments streamline reviews of installations or require only certain approvals. Some local efforts are not “regulatory” in any sense, but instead reflect proactive approaches to make the approval process work more smoothly. In some cases, a provider may propose an installation where it has significant adverse effects because the provider either cannot or has not attempted to identify a more appropriate site, or has not contacted the proper local personnel. To address this, the City of Portland, Oregon, has developed a list of all relevant City landlords and regulators, to ensure that this information is readily available to wireless companies.¹² Local governments also regularly meet with wireless-facility providers to develop ordinance provisions. These collaborative efforts are working and will continue to work as new technologies develop.

B. The Industry and Local Governments Can Only Work Collaboratively if Local Standards Remain Enforceable.

If local governments and industry are to continue working collaboratively to streamline deployment, local conditions must remain enforceable. If Section 6409(a) were read to require otherwise, it would undermine local governments’ and industry’s current incentive to work together.

Facilities that a local government approves with a stealth design demonstrate the point. When a local government approves a stealth facility, it assumes that the facility will not be modified to defeat the design later. In a community with 30-foot palm trees, a local government

¹² City of Portland’s Wireless Rates and Contacts, *available at: <https://www.portlandoregon.gov/revenue/article/474880>*; *see also* Reply Comments of the City of San Jose, California, *In re Acceleration of Broadband Deployment*, WC Docket No. 11-59 (Sept. 30, 2011) (addressing City’s efforts to expand broadband deployment).

may find that approving a 30-foot stealth palm tower presents little difficulty. But the local government would find it must more difficult to approve the facility if the provider could later add a 20-foot extension without palm fronds.¹³ Similarly, a local government may be able to permit an installation on a historic building's rooftop if the installation is not visible from the street and if the local government can require that it remain invisible. But if the installation can be modified so that the facility is visible, the situation may well be different. Indeed, with historic structures, where the very process of attachment may affect the integrity of a structure or damage irreplaceable architectural features,¹⁴ it may be important for local governments to regulate the *removal* or *replacement* of existing equipment, even if the wireless equipment's physical dimensions do not change at all.¹⁵

C. The Varied Responsibilities Associated with Approving a Wireless-Tower or Base-Station Modification Cut Against a Federal Regulatory Approach.

The Commission should also prefer a best-practices model because no federal regulatory model can adequately address the varied local concerns that a modification request triggers. The Commission does not seek to be a “national zoning board,” but it must understand how local

¹³ In fact, because of the height differential, even if palm fronds were included, the size would defeat the facility's stealth characteristics.

¹⁴ Joint Declaration of Emily Stillings and Janet Murphy (“Murphy-Stillings Declaration”), ¶ 14, attached hereto at Exhibit A.

¹⁵ Predictability and enforceability may be particularly important where “non-conforming” sites are involved. Many existing installations, not just cell towers, are “grandfathered” when local, state, or national codes change. For example, a homeowner need not change a home's existing wiring merely because it no longer conforms to code. But if the homeowner makes an addition to the home, the grandfathering may disappear, and the homeowner must bring the home into compliance. This approach strikes a balance between requiring continual modification or removal of existing structures, and allowing a facility that is non-compliant to remain in place forever. Over time, facilities either maintain the status quo or come into compliance.

governments exercise their responsibilities. The process typically involves a number of distinct, although interrelated, questions. They include:

Is a particular use permitted in a certain area? This is a classic zoning issue. A commercial building may not be permitted in a residential district, for example, or may be permitted subject to limits that ensure that the commercial use does not negatively impact a residential neighborhood.

Is the proposed use consistent with height and other design-related limitations in the area? For example, a house in a residential area may be subject to height limits or design standards, such as setbacks from other properties in the street.

Is the proposed use safe? That a use is a permitted use does not allow a builder to install pipes, electrical wiring, or supports that are inconsistent with local, state, and national building codes.

Is the property or its use subject to particular limitations that may prevent activities that are permitted elsewhere? In a historic district, replacing a window visible to the public may involve far more thorough review than replacing a window elsewhere. In an environmentally sensitive areas, or areas where cultural artifacts have been identified, trenching and other activities that may be permitted routinely elsewhere may be subject to strict controls.

Will the work be performed properly? Local governments ensure that any work performed will be consistent with safe and sound engineering practices including, for example, whether the applicant has a plan for properly guarding against harms to utilities, or (where work is in the right-of-way) addressing traffic diversion.

Local governments necessarily take different approaches depending on what factor is most significant. In some places, a major concern may be ridgeline views, which leads to

requirements limiting facility size to match surrounding terrain features.¹⁶ On rights-of-way, the primary concerns may be public safety, access, and consistency of the proposed facility with the area where it will be located (a utility pole might not be permitted, for example, where all utilities are underground). Local governments also often spend significant public resources to develop historic districts and below-the-street areas, and then to regulate the size and visibility of utility installations to promote economic development and to bring jobs and investment. Local governments can address questions as part of the zoning process; or the zoning process may be distinct from a “building permit” process; or from an administrative land use process for reviewing proposed towers. The local government may also involve state historic preservation organizations and local organizations tasked with protecting historically sensitive sites. Resolving issues can have ripple effects. For example, if a tower increases in size, it may require design changes to comply with building codes, or it may create safety, historic preservation, or other issues.

Local government have also come to understand that, perhaps counterintuitively, smaller structures like utility poles and other masts often present problems that are more significant than wireless towers. This is in part because wireless towers typically have been located to avoid potential environmental and historical impacts, while smaller structures are now being deployed in neighborhoods and in historically sensitive areas under conditions that assume that the facilities will change only slightly in the future. A large tower’s fall zone may accommodate 20-

¹⁶ Brian Nearing, *Relaxed cell tower rules risk Adirondack views- New relaxed guidelines on cellphone towers could mar Adirondacks*, Timesunion.com (Jan. 17, 2014) (last accessed Feb. 1, 2014), available at: <http://www.timesunion.com/business/article/Relaxed-cell-tower-rules-risk-Adirondack-views-5153765.php>

foot additions, but a utility pole or similar structure in a residential neighborhoods typically cannot. These concerns are best addressed and streamlined locally.¹⁷

D. The Commission Should Endorse a Best-Practices Model.

A fundamental policy question that the Commission must address under Section 6409(a) is: *what will make the local modification-request process work most effectively?* The answer is not fundamentally changing the local-siting system, but encouraging local governments and industry to address issues collaboratively using the best approaches (for reasons suggested above, there will not be a single “best practice”). If local governments and industry cannot reach a consensus on an issue, only then should the Commission regulate.

The Commission certainly can take this approach. Congress gave the Commission authority to “implement and enforce this title as if this title is a part of the Communications Act of 1934.”¹⁸ This includes the authority to decide *not* to adopt federal regulations that would not best further Congress’s purpose. Moreover, while Congress has defined the *minimum* standards for what constitutes an “eligible facilities request,” the Act does not prevent the Commission from adopting additional criteria for an eligible facilities request now, particularly if doing so is likely to advance its ability to protect against harms to the environment or to historic sites, or to otherwise protect the public interest, while advancing deployment.

At the same time, the Commission must not penalize local governments that approve modification requests under a best-practices framework. The Commission should instead clarify that any installations that a local government approves now will not be automatically modified if

¹⁷ CTC Technology & Energy, *Engineering Analysis of Technical Issues Raised in the FCC’s Proceeding on Wireless Facilities Siting*, attached hereto at Exhibit B (“CTC Report”), at 23 (describing streamlining process for one community).

¹⁸ 47 U.S.C. § 1403.

the Commission opts to adopt stricter rules later—except perhaps on a case-by-case basis. Without this assurance, a local government would still face serious risk whenever it approves a tower or base station. Moreover, because the Commission’s current non-binding guidance is essentially identical to the proposed rules discussed below, it creates a barrier to sensible deployment.¹⁹ The Commission should clarify the Bureau Guidance to reflect the following principles that we develop in Section II:

- ***Section 6409(a) applies to modifications of “wireless towers” and associated “base stations,” not to all structures.*** Installations that a local government approves on small support structures that are not towers—including utility poles and buildings—will remain small and cannot expand into something far more intrusive.
- ***Section 6409(a) applies to the classic zoning question—is this a permitted use in this area?—not to other regulatory approvals or conditions.*** This will ensure that Section 6409(a) facilitates zoning review, without broadly interfering with important local protections. Local governments can continue to require compliance with other local requirements and conditions, such as historical preservation laws, safety codes, and other requirements.
- ***“Substantially change the physical dimensions” is a relative term that depends on the specific quantitative and qualitative features of the wireless tower or base station to be modified.*** For a 40-foot tower located in a wooded residential area and designed to complement the surrounding tree canopy, adding a 20-foot extension changes the tower’s physical dimensions in a substantial way. For a 160-foot tower in an industrial zone, a

¹⁹ *Wireless Telecommunications Bureau Offers Guidance on Interpretation of Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012*, Public Notice, 28 FCC Rcd. 1 (WTB 2013) (“Bureau Guidance”).

20-foot extension likely would not have the same effect. Additionally, the permitting process for the underlying facility can indicate what will be a “substantial change.” As noted above, in California, a provider can essentially obtain pre-approval for future modifications through the initial siting process—and avoid further discretionary reviews.

By issuing that guidance, which we believe is consistent with Section 6409(a), and encouraging local governments and industry to develop best practices, the Commission can create an environment where both new installations of and modifications of existing towers and base stations can proceed efficiently.

II. IF THE COMMISSION DECIDES TO MAKE RULES UNDER SECTION 6409(a) IMMEDIATELY, IT MUST REVISE ITS PROPOSED RULES.

If the Commission determines that it should adopt rules immediately, it should also find that the answers to the NPRM’s questions require it to modify its proposed rules significantly. In this section, we identify some consequences of the FCC’s proposed rules, read literally. As we explain below, these consequences are so significant—and would affect other national policies protecting the environment and our cultural heritage so dramatically—that it is impossible to imagine that Congress intended them. We address how the Commission must modify the rules to honor Congress’s intent and to facilitate broadband deployment.

A. The Proposed Rules Are Unreasonable And Lead to a Wide Range of Problems.

The Commission’s proposed rules are neither reasonable nor workable. As we discuss in detail in Section II.B, the Commission’s rules suffer from at least the following flaws:

- *The rules apply Section 6409(a) more broadly than its language permits.* The Commission defines a “base station” to include any structure that supports part of a base station. This could mandate approvals of requests to modify a wide range of *non-tower*

support structures—e.g., a building; a rooftop; a utility pole; and a stealth facility like a flagpole—so long as the modification is not a “substantial change.”

- ***The rules improperly define “substantially change” in absolute terms that do not vary based on the location or nature of the tower or base station.*** For example, vertically, the “support structure” could increase by 10%, or if greater, up to 20 feet or the distance required to avoid interference among antennas. Horizontally, an appurtenance can extend the greater of (a) the width of the support structure; (b) 20 feet from the support structure; or the distance required to shield facilities from the elements. The provider could place up to four equipment cabinets at the site (with no limits placed on the size); and one equipment shelter. And as long as excavation does not occur outside the “current boundaries of the leased or owned property surrounding the structure and any access or utility easements currently related to the site,” the proposed modification is deemed insubstantial, and must be approved.
- ***The rules do not recognize that local governments can condition approvals on compliance with non-zoning criteria.***

Arguably, if a proposed modification meets these defined standards, it must be approved even if it creates a range of problems:

1. Public Safety

Modifications to wireless facilities present real safety risks. The Commission’s proposed rules would improperly increase these risks. Two examples illustrate the point. In the 2007 Malibu Canyon Fire, three utility poles snapped because they had been overloaded by the

installation of a DAS system by NextG Networks.²⁰ The result was a fire that burned 3,836 acres, 36 vehicles, and 14 structures (including historically significant structures), and damaged others.²¹ It also caused injuries to three firefighters.²² NextG recently entered into a settlement with the California Public Utilities Commission under which NextG paid \$14.5 million in penalties, including at least \$6 million for inspections of the poles and pole attachments that it owns in California. NextG acknowledged that it has installed facilities, including a fiber optic cable, that were not safe in light of the condition of the pole and known local conditions (the Santa Ana winds).²³ The CPUC settlement penalized NextG for its past actions, but as importantly, it required the company to take steps to prevent a future recurrence of the problem. Yet unless the Commission clarifies Section 6409(a)'s scope, it could be read to compel local governments to approve attachments and expansions of overloaded utility poles.

Another example comes from Savannah, Georgia, one of the members of the Georgia Municipal Association. Because the City adjoins the U.S. Army's Hunter Airfield and is often crossed by low-flying helicopters, the City maintains very strict limits on the height of structures that can be placed on buildings to avoid making what is already a hazardous operation more

²⁰ M. Caskey, The Malibu Times, *CPUC Approves \$51.5-Million Malibu Canyon Fire Settlement* (Sept. 24, 2013), available at: http://www.malibutimes.com/news/article_3d62067a-2175-11e3-86b6-001a4bcf887a.html.

²¹ *Id.*

²² *Id.*

²³ *Decision Conditionally Approving the NextG Settlement Agreement, Investigation on the Commission's Own Motion into the Operations and Practices of Southern California Edison Company, Cellco Partnership LLP d/b/a/ Verizon Wireless, Sprint Communications Company LP, NextG Networks of California, Inc. and Pacific Bell Telephone Company d/b/a/ AT&T California and AT&T Mobility LLC, Regarding the Utility Facilities and the Canyon Fire in Malibu of October 2007*, Investigation 09-01-018 (Sept. 19, 2013), at 10, available at: <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M077/K059/77059441.PDF>.

dangerous for pilots and the public.²⁴ The Commission's rule allowing a 20-foot extension to any wireless support structure would not only create the very risks that Savannah is seeking to avoid, but could also prevent the City from imposing conditions that are designed to ensure that the hazard is visible.²⁵

Indeed, local governments regularly subject wireless facilities to building-permit and other public-safety requirements. Yet the Commission's proposed rules do not recognize that these requirements remain enforceable if a Section 6409(a) eligible facilities request is involved. The Commission certainly cannot assume that certain technologies—*e.g.*, DAS and small cells—present fewer safety risks than other facilities. After all, the Malibu Canyon fire involved a DAS facility. And risks only increase when facilities are placed in denser residential areas. In Montgomery County, Maryland, an *initial* placement of DAS facilities involved 65-foot poles in front of homes. Under the proposed rules, the facilities could increase to 85-foot size, creating a truly obtrusive structure presenting fall-zone safety hazards.²⁶

2. In Streets and Rights-of-Way

Providers often place facilities along streets and public rights-of-way. But wireless providers—interested in quick deployment—are not focused on how their facilities impact the

²⁴ The Inquisitr.com, *Two Injured, One Killed in Army Nightstalker Helicopter Crash* (Jan. 16, 2014), available at: <http://www.inquisitr.com/1098183/two-injured-one-killed-in-army-nightstalker-helicopter-crash/>.

²⁵ CTC Report at 21.

²⁶ See CTC Report at 13, Figures 10 & 11. The report shows the current pole, and how it might be modified under the Commission's proposed rule.

public. For example, in Lafayette, California, AT&T installed a massive facility on a utility pole near a school that overhung the sidewalk, creating a significant hazard for children.²⁷

Local governments have approved many facilities near streets including this facility in Bellevue, Washington:



But under the Commission's proposed rules, unless the scope is clearly confined, a DAS or wireless provider may arguably add 20-foot extensions, four equipment cabinets, and an equipment shelter that extend over and into the road and sidewalk *without any local oversight*. Considering that a 20-foot extension could block almost an entire roadway, the rules' impact and risks are obvious.

²⁷ KTVU.com, *New cell phone towers, bringing better reception, comes with a price*, available at: <http://www.ktvu.com/videos/news/special-report-new-cell-towers-improved-reception/vF3Mq/>

3. Stealth Facilities

Local governments often approve stealth facilities. For example, the City of San Jose, California, has approved wireless facilities hidden in church steeples and disguised as flag poles in residential areas:



The City of Ontario, California has taken the same approach, approving facilities within signs, church facilities, and other structures:



Yet, again, the Commission’s proposed rules would arguably allow automatic 20-foot extensions (or more) to these structures, and the rules would not require the extensions to be similarly hidden. The problem is not limited to facilities that are disguised. Some facilities are effectively hidden through careful placement. In fact, local governments often work closely with providers to find specific, alternative placements that minimize visual disruptions. In some cases, local governments require vaults and equipment to be placed underground. In these cases, too, the Commission’s proposed rules would present real problems.²⁸

4. Environmental

If the Commission adopted its proposed rules without clarification, they would also have a significant adverse effect on environmentally sensitive areas.²⁹ For example, the Commission’s existing rules recognize that a 200-foot tower and a shorter tower are likely to have many

²⁸ CTC Report at 7, 22.

²⁹ Declaration of Joseph Monaco, attached hereto at Exhibit C (“Monaco Declaration”).

different impacts, including lighting differences, on the environment. Two-hundred-foot towers are excepted from the exclusion under the Nationwide Programmatic Agreement Regarding the Section 106 National Historic Preservation Act Review Process (“NPA”)³⁰ precisely for this reason; and the FCC’s Final Programmatic Environmental Assessment for the Antenna Structure Registration Program likewise recognizes potentially important differences on migratory birds “all other things being equal” based on antenna height.³¹ Yet under the proposed rules, state and local governments arguably could not protect against the problems created by increasing a tower from 180 to 200 feet, or adding guy wires to support increased heights.

The problems are not limited to modifications to a tower’s height. A facility may be placed on property that includes wetlands or other environmentally sensitive areas. Yet under the rules, a local government arguably must treat as “insubstantial” a proposed change in a wireless tower or base station that requires new trenching directly through a wetland, as long as the wetland is on the same property occupied by an existing site. Relatedly, a facility may (after careful evaluation) be authorized for an environmentally sensitive site subject to strict limits on size and on modification. But the fact that a site is already degraded does not mean that future modifications will have no adverse effects. To the contrary, in an area that is already degraded, even small modifications can have major effects that must be evaluated in a site-specific context.³² The proposed rules arguably would require a local government to ignore these

³⁰ 47 C.F.R. Part 1, App. C, Nationwide Programmatic Agreement Regarding the Section 106 National Historic Preservation Act Review Process (“NPA”), at ¶ 55.

³¹ See Chapter. 4.6.3 re migratory birds, *available at*: http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-312921A1.pdf

³² Monaco Declaration at ¶¶ 9, 16-19; *Green Mt. Realty Corp. v. Leonard*, 688 F.3d 40, 56 (1st Cir. 2012) (upholding finding that “any further construction on the site, however slight, will adversely affect the wetlands area”).

impacts. To the extent that the proposed rules make environmental protection turn not on a change's potential impact at a particular site, but on whether a particular change crosses an arbitrary "size" barrier, the rules turn environmental policy on its head.³³

5. Historic Preservation

Many local governments have historic preservation laws that review changes to historic districts, buildings, or structures to determine whether the changes are in the public interest. Some historic districts have relatively low-rise buildings, where antennas can be placed on rooftops without altering a neighborhood's appearance. In other places, wireless facilities can be hidden in existing structures. Local governments also sometimes require wireless facilities on historic structures to be colored to match existing brickwork. But the Commission's rules, if read broadly, would present real problems in these areas.³⁴

Take a neighborhood with a historic row house supporting an antenna. Since the proposed rules define base station as a support structure, they could be read to allow the row house itself to be changed by the equivalent of one additional story (20 feet). This would significantly alter the neighborhood's streetscape and historic character. Even if the row house itself could not be changed, the rules would allow a provider to expand the antenna with a 20-foot vertical addition, four equipment cabinets, and an equipment shelter. This could negatively impact the surrounding vista and viewshed. A historic structure's context is important to its historic integrity. Increasing the height of the antenna and adding equipment cabinets and shelters would significantly alter that context.³⁵

³³ Monaco Declaration at ¶¶ 9, 16-17.

³⁴ Murphy-Stillings Declaration at ¶¶ 3, 6-17.

³⁵ *Id.* at ¶¶ 14-17.

* * *

The Commission’s proposed rules, unless clarified, would have serious adverse effects in local communities. They would jeopardize public safety, disrupt environmentally and historically sensitive areas, and undermine the essential planning and land-use measures that define and distinguish our communities. They would also make it more difficult for a local government to approve initial facilities; the risk of later dangerous and unwanted substantial changes would be too great. It is not plausible to believe that Congress intended this result.

B. Section 6409(a)’s Key Terms, Procedures, and Remedies Can Be Given a Reasonable Reading.

Although the Commission cannot remedy its proposed rules’ problems with small tweaks, it can nevertheless read Section 6409(a) in a sensible way. Based on the answers to the NPRM’s questions. In this section, we answer the questions and propose appropriate accompanying changes to the Commission’s proposed rules.

1. “Wireless tower.”

The Commission asks how to define a “wireless tower” and “base station.”³⁶ The Commission should define “wireless tower” as it has in the Nationwide Programmatic Agreement for the Collocation of Wireless Antennas (“Collocation Agreement”),³⁷ and as the term is ordinarily understood. By applying Section 6409(a) to a “wireless tower” but not to other non-tower support structures, Congress limited the statute’s scope—and avoided extending it to modification requests that are most likely to create significant problems. A “wireless tower” is a traditional cell tower, not a utility pole, building, or other support structure.

³⁶ NPRM ¶ 107.

³⁷ 47 C.F.R. Part 1, App. B, Nationwide Programmatic Agreement for the Collocation of Wireless Antennas (“Collocation Agreement”).

The Commission has previously explained that the two key components of wireless infrastructure are a component that communicates with mobile devices—the base station—and a structure that supports that base station—a “tower” or “other structure”:

[Wireless service infrastructure] facilities are comprised largely of cellular base stations and towers or other structures on which the base stations are situated. . . . These base stations are generally placed atop a purpose-built communications tower, or on a tall building, water tower, or other structure providing sufficient height above the surrounding area.³⁸

Section 6409(a) follows this framework. It addresses a base station and one type of support structure, a wireless tower. In Section 6409(a), Congress provided no indication that it intended to depart from the common understanding of “tower” and “base station” that is widely shared by the public, the industry, and the Commission.

Indeed, in the collocation context, the Commission defined “tower” to mean “any structure built for the sole or primary purpose of supporting FCC-licensed antennas and their associated facilities.”³⁹ The Commission has regularly distinguished between “towers” and other structures that sometimes support antennas. For example, in the Fact Sheet to the Collocation Agreement, the Commission explained that “[a] water tower, utility tower, or other structure built primarily for a purpose other than supporting FCC-licensed services is not a ‘tower’ for purposes of the Agreement, but is a non-tower structure.”⁴⁰ In a public notice for a 2012 collocation workshop, the Commission explained that panelists will discuss considerations

³⁸ *In re Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services*, 26 FCC Rcd. 9664 ¶ 308 (2011).

³⁹ Collocation Agreement at I.B. The NPA uses a slightly different definition. NPA II.A.14.

⁴⁰ Public Notice, *The Wireless Telecommunications Bureau and Mass Media Bureau Announce the Release of a Fact Sheet Regarding the March 16, 2001 Antenna Collocation Programmatic Agreement*, 17 FCC Rcd. 508 (2002).

underlying collocations “on a variety of structure types, *including wireless towers*, AM radio/broadcast towers, public safety communications towers, utility infrastructure, rooftops, and water tanks.”⁴¹ The Commission’s recent report on competition in the mobile-service marketplace similarly referred to “attaching equipment to pre-existing towers *and other structures (e.g., rooftops, water tanks, power lines, and utility poles)*.”⁴² And the Commission’s NPRM here contrasts the facilities that host small cells and DAS—“short structures,” “rooftops,” and “poles”—with the “towers” that host macrocells:

Because the [DAS and small cell] facilities deployed at each node are physically much smaller than macrocell antenna and base station equipment, they can be placed on a variety of *short structures* or on rooftops. Thus, providers can deploy the technology in geographic areas where constructing *towers* is not feasible Further, as the deployments *on poles and rooftops* are less visible than macrocells *on tower structures*, they may be particularly desirable for addressing capacity or coverage needs in areas with stringent siting regulations, such as historic districts.⁴³

It specifically explains that a collocation on a water tank is a collocation on a “non-tower” structure.⁴⁴

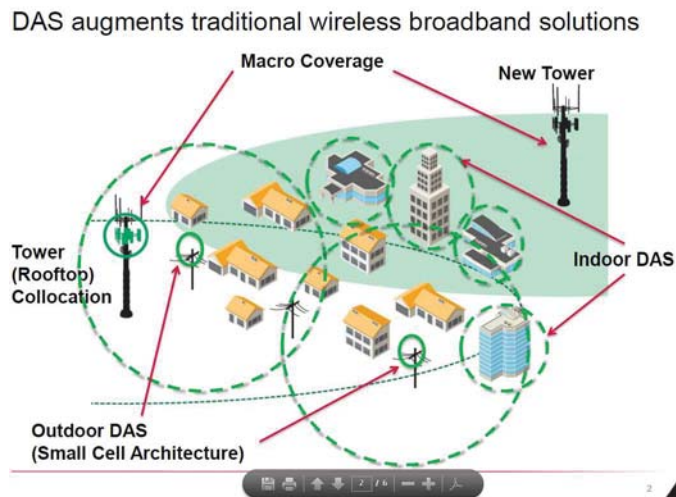
⁴¹ Public Notice, *Wireless Telecommunications Bureau Announces Workshop: Promoting Mobile Broadband in Your Community by Collocating Wireless Antennas on Communications Towers and Other Structures*, 27 FCC Rcd. 3998 (2012).

⁴² *In re Annual Report & Analysis of Competitive Mkt. Conditions*, 28 FCC Rcd. 3700, 3765 ¶ 76 (2013) (emphasis added).

⁴³ NPRM ¶ 17 (emphasis added). *See also* NPRM ¶ 24 (referring to “antenna collocations on existing buildings or towers”); Collocation Agreement at V (contrasting collocation of antennas on a “tower” with collocation on “buildings and non-tower structures”).

⁴⁴ NPRM ¶ 42.

This view of “tower” is widely shared in the industry.⁴⁵ For example, at the Commission’s informational seminar on DAS and small cells, American Tower contrasted a “tower” with structures that support small cells and DAS:⁴⁶



The distinction between a tower and non-tower is important. Unlike a structure built for the sole or primary purpose of supporting antennas, a non-tower structure typically has a different architectural history, has been constructed in a different context, has other stakeholders and owners, and presents different safety issues.⁴⁷

If Section 6409(a)’s language left any doubt about whether it applies to support structures other than traditional towers—and it does not—the legislative history removes it. It explains that

⁴⁵ CTC Report at 19.

⁴⁶ Alex Gamota, American Tower, *Key DAS Business Concepts: Accelerating Broadband*, at 2 (Feb. 1, 2012), available at: <http://transition.fcc.gov/presentations/02012012/panel-1/alex-gamota.pdf>.

⁴⁷ CTC Report at 19.

the law “would require approval of requests for modification *of cell towers*.”⁴⁸ It does not mention modifications to any other facility that might sometimes support an antenna. This is precisely what one would expect from Section 6409(a)’s plain language.

There is no justification for departing from this widely shared definition of “tower” here. The term “wireless” does not change this conclusion. Rather, it confirms that Section 6409(a) applies to a particular type of tower—a *wireless service* tower—as opposed to a tower that serves as a support for other purposes. The Commission asks whether it should conclude that because Congress used the term “wireless” in Section 6409(a), rather than the term “personal wireless services” in Section 332(c)(7), that Section 6409(a) covers a broader range of wireless facilities.⁴⁹ It should not. The term “wireless” is not used in the Communications Act to refer to broadcast or any number of radio-based services, but instead to describe several services that collectively make up “personal wireless services,” including, for example “unlicensed wireless services.” Section 6409(a)’s use of “wireless,” along with its legislative history, demonstrates that Congress was concerned with the sorts of services that are the subject of Section 332(c)(7) and not, for example, broadcast towers. Indeed, the use of “base station”—which has traditionally referred to the electronics used to communicate with “mobile” devices—indicates that Congress did not intend Section 6409(a) to reach all possible devices that might be engaged in a transmission function.⁵⁰

⁴⁸ H.R. Rep. No. 112-399, at 133 (2012) (Conf. Rep.) (emphasis added).

⁴⁹ NPRM ¶ 103-04.

⁵⁰ Many local governments have encouraged Wi-Fi networks and made space available on light standards and at other locations, based on promises that the installed devices will not exceed a certain size. If a Wi-Fi gateway—which is generally quite small—were treated as a “base station” under Section 6409(a), the risks of allowing these attachments would become quite significant.

2. “Base station.”

The Commission should define “base station” consistent with its normal, technical meaning. As explained above, the two primary components in wireless infrastructure are a support structure, and the electronics equipment that transmits or receives signals from the user equipment—the “base station.”⁵¹ The latter is defined as “a network element in radio access network responsible for radio transmission and reception in one or more cells to or from the user equipment.”⁵² The base station manipulates a signal so that it can be radiated to or received from mobile users.

The Commission should note two important concepts about a “base station.” First, a base station does not include all the portions of a communications network to which it may be attached; the term refers to on-site equipment like transceivers and modulators, not the fiber

⁵¹ *In re Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services*, 26 FCC Rcd. 9664 ¶ 308 (2011) (emphasis added).

⁵² Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Vocabulary for 3GPP Specifications, *available at*: http://www.etsi.org/deliver/etsi_tr/121900_121999/121905/11.03.00_60/tr_121905v110300p.pdf; CTC Report at 20.

optics that may carry a signal from the “base station” to another location.⁵³ Second, support structures are not “base stations.” They do not communicate with mobile units.⁵⁴

3. “Wireless Tower or Base Station.”

The Commission proposes to read “wireless tower or base station” together.⁵⁵ Although this is not in itself objectionable, the Commission’s proposed joint reading is. It would alter the ordinary meaning of “base station,” and effectively read “wireless tower” out of the statute.

The Commission improperly and circularly proposes to define “base station” as a support structure for “part of a base station.” Specifically, the Commission reads “wireless tower or base station” to include “structures that support or house . . . part of a base station, . . . [and that] were not built for the sole or primary purpose of providing such support.”⁵⁶ The NPRM seems to recognize that if a base station were to include the support structure, the term “wireless tower” would be superfluous, violating a cardinal rule of statutory interpretation.⁵⁷ But the proposed rules make no such distinction. The rules define a “base station” to include any “structure that currently supports or houses an antenna, transceiver, or other associated equipment that

⁵³ CTC Report at 20. NextG has stressed this point for the Commission. *See, e.g.,* NextG Networks of California, Inc., *In re Petition of NextG Networks of California, Inc. for a Declaratory Ruling that its Service is Not Commercial Mobile Radio Service*, Petition for Declaratory Ruling, WT Docket No. 12-37 at 3 (Dec. 21, 2011) (“The Hub is located at a central location, typically its customer’s Base Station, that contains equipment such as routers, switches, and signal conversion equipment. . . . The carrier customer’s Base Station equipment includes radio equipment that ultimately controls the radio frequency transmissions. Thus, all RF transmissions and wireless services are controlled and provided by NextG’s wireless carrier customers – not NextG – through the carrier customer’s equipment *located at the Base Station.*”) (emphasis added); NextG Reply Comments, WT Docket No. 12-37, at 3 (May 14, 2011).

⁵⁴ CTC Report at 20.

⁵⁵ NPRM ¶ 108.

⁵⁶ NPRM ¶ 108.

⁵⁷ NPRM ¶ 108 n.238 (citing *Miller v. Clinton*, 687 F.3d 1332, 1347 (D.C. Cir. 2012)).

constitutes part of a base station.”⁵⁸ This would make Section 6409(a) apply to a variety of non-tower support structures, including buildings, walls, utility poles, and other structures. A non-tower support structure cannot be a “base station” for at least two reasons: (1) as noted above, it does not fit within existing definitions of the term; and (2) the expanded definition is hopelessly circular—a “base station” cannot be defined as a structure that supports a “base station.” Reading “wireless tower or base station” to mean “wireless tower or base station or non-tower supporting a base station” would improperly make Congress’s deliberate and express use of one commonly understood support structure—“wireless tower”—meaningless. Section 6409(a) would instead extend to *anything* and *everything* supporting wireless facilities—without the slightest textual hint, and in the face of a legislative history that refers singularly to modifications of “cell towers.”⁵⁹ The Commission cannot transform Section 6409(a) into a different statute.

The Commission is correct in one sense, however, that reading “wireless tower or base station” together is appropriate. Under the NPA, the term “base station” is not defined, but the closest comparable definition is the term “antenna,” which refers to the antenna and on-site transmission equipment.⁶⁰ Because a “tower” and “base station” are often situated together, Section 6409(a) is best read to address circumstances where both co-exist and the eligible-facilities request modifies one or the other.⁶¹

⁵⁸ NPRM Appendix A, Subpart BB § 1.30001(b)(1).

⁵⁹ H.R. Rep. No. 112-399, at 133 (2012) (Conf. Rep.).

⁶⁰ NPA at § II.A.1.

⁶¹ Section 6409(a)’s separation of “wireless tower” and “base station” with “or” does not require the Commission to read the statute to apply to situations where a “tower” and “base station” are not together. *Denver-Chicago Trucking Co. v. The Republic Drug Co.*, 306 P.2d 1076, 1078 (1957) (finding it “well established that courts will sometimes construe ‘or’ to mean ‘and’ in order to carry out the plain meaning or intent of the legislature”).

4. “Existing” and “Collocation.”

Section 6409(a) applies only to a request to modify a wireless tower or base station that is “existing.”⁶² The statute also applies to three “eligible facilities requests” to modify an existing tower or base station: a request that involves (a) “collocation of new transmission equipment”; (b) “removal of transmission equipment”; or (c) “replacement of transmission equipment.” Section 6409(a) does not govern any other request.

The Commission asks for comment on Verizon’s argument that because the Collocation Agreement defines “collocation” to include antenna installation “on an existing tower, building or structure,” Section 6409(a) must also apply to “collocations on buildings and other structures, even if those structures do not currently house wireless communications equipment.”⁶³ Verizon is wrong. The Commission’s proposed rules define “collocation” properly: “The mounting or installation of transmission equipment on an eligible support structure for the purpose of transmitting and/or receiving radio frequency signals for communications purposes.”⁶⁴ Verizon is mistaken for at least two reasons:

First, the NPCA’s definitions do not define Section 6409(a)’s scope; the statute does. That scope is clear and, as explained above, modifications of “buildings and other structures” fall well outside of it. The statute instead addresses only modifications to one type of support structure—a “wireless tower”—and to “base stations,” which these “buildings and other

⁶² 47 U.S.C. § 1455(a).

⁶³ NPRM ¶ 111 (citing Letter from Tamara Preiss, Verizon, to Marlene H. Dortch, FCC, WC Docket No. 11-59, at 2 (filed Feb. 28, 2013)).

⁶⁴ NPRM Appendix A, § 1.30001(b)(2); NPRM ¶ 113. An “eligible support structure” is a “wireless tower” or “base station,” as those terms are addressed herein.

structures” certainly are not.⁶⁵ Therefore, under Section 6409(a)’s express and narrow framework, Verizon’s broad reading of “collocation” is misplaced.

Second, even if Section 6409(a) did apply not only to modifications of a “wireless tower” or “base station” but also to modifications of non-tower support structures, Verizon’s scenario would present no “eligible facilities request” because the non-tower structure does not already host any “transmission equipment.” Without any existing transmission equipment, a provider certainly could not request to “remov[e]” or “replac[e]” it under Section 6409(a)(2)(A) or (B). Likewise, under Section 6409(a)(2)(C), a provider could not “collocate[e] . . . new” transmission equipment if no *older* transmission equipment were already in place. Congress would not have added the word “new” if it intended Section 6409(a) to address a site’s first “transmission equipment”; such equipment would be “located with” no older equipment.

The Commission also asks whether Section 6409(a) applies to a request to “replace or harden a tower.”⁶⁶ It does not. To replace a tower is not to modify an existing tower, but to substitute a new one. Congress demonstrated that it knew how to address “replacement” when that was its intent.⁶⁷ Moreover, Section 6409(a) does not list either replacing or hardening a tower as an “eligible facilities request.” Therefore, Section 6409(a) is best read not to address such a request.

⁶⁵ See *supra* at Section II.B.3. Even if Section 6409(a) could be read to apply to a “base station” on a building or other structure, not a wireless tower, that is not the case under Verizon’s scenario—because there is no existing “base station” that communicates to mobile stations.

⁶⁶ NPRM ¶ 115.

⁶⁷ 47 U.S.C. § 1455(a)(2)(C) (referring to “replacement of transmission equipment”).

5. “Substantially Change the Physical Dimensions”

- (a) *A facility’s physical-dimension change is “substantial” if it alters the existing facility’s dimensions in an important way.*

If the Commission adopts any rules, it should adopt the ordinary meaning of the term “substantial,” and make it clear that “substantially change” is a relative term that will vary with circumstances.

Section 6409(a) asks when collocating, removing, or replacing transmission equipment would cause a tower’s or base station’s physical dimensions to change “substantially.” As the Commission has recognized in other contexts, defining “what would constitute a substantial change” so that it may be applied in every case “is not possible.”⁶⁸ The same is true here: what is a substantial change depends on context, and does not lend itself to a mechanical, numerical formula.

In its ordinary meaning, a “substantial” change is a change that is “important” or “essential.”⁶⁹ If all towers and base stations were of a similar design and located in similar places, a “substantial change” might be defined by a single, absolute standard—as in the proposed rules. But where towers and base stations vary dramatically in size and design, and where the location may affect a change’s impact significantly, an absolute standard will not do. Indeed, the Commission’s NPRM questions themselves correctly reflect this.⁷⁰ A change’s

⁶⁸ *In re Amendment of Section IV of Broad. Application Forms 301, 303, 314, & 315*, 5 F.C.C.2d 175, 177 (1966).

⁶⁹ “Substantial.” Merriam-Webster.com. Merriam-Webster, n.d. Web. 3 Feb. 2014, *available at*: <http://www.merriam-webster.com/dictionary/substantial>.

⁷⁰ *See, e.g.*, NPRM ¶ 121 (“Should changes in physical dimensions that would defeat or be inconsistent with the stealth characteristics of the structure be considered substantial?”); NPRM ¶ 128 (“[S]hould modifications that alter a facility in a fashion inconsistent with a local ordinance or with conditions on the structure’s use be considered to ‘substantially change’ its physical dimensions?”).

substantiality necessarily depends on context—on whether it alters the existing facility’s dimensions in an important way. The word “substantially” is often ascribed this legal meaning. For example, in copyright law, courts do not determine whether works are “substantially similar” by asking only whether two works are quantitatively similar. They ask whether the works are similar in important respects.⁷¹ As a result, even if the material copied is “quantitatively small,” if it is “qualitatively important,” a fact-finder may find “substantial” similarity.⁷² The same principle applies here: even if a physical-dimension change in a “wireless tower” or “base station” is quantitatively small, it may nevertheless be substantial.

(b) *The Commission’s proposed definition of “substantially change the physical dimensions” is illogical, dangerous, and counterproductive.*

The Commission’s proposed rules take the wrong approach to this issue, however. They define “substantially change the physical dimensions” with an absolutist test lifted almost verbatim from the Collocation Agreement—even though the Collocation Agreement uses this test for a different purpose and only to measure increases in the size of “towers.”⁷³ Specifically, the Commission proposes that a modification would “substantially change the physical dimensions” of a “wireless tower or base station” only if:

(1) the proposed modification would increase the existing height of the support structure by more than 10%, or by the height of one additional antenna array with separation from the nearest existing antenna not to exceed twenty feet, whichever is greater, except that the proposed

⁷¹ 4-13 Nimmer on Copyright § 13.03 (“No easy rule of thumb can be stated as to the quantum of fragmented literal similarity permitted without crossing the line of substantial similarity. . . . The quantitative relation of the similar material to the total material contained in plaintiff’s work is certainly of importance. However, even if the similar material is quantitatively small, if it is qualitatively important, the trier of fact may properly find substantial similarity.”).

⁷² *Id.*

⁷³ NPRM ¶¶ 117-19, Appendix A, Proposed Rule § 1.30001(d).

modification may exceed the size limits set forth in this paragraph if necessary to avoid interference with existing antennas; or

(2) the proposed modification would involve the installation of more than the standard number of new equipment cabinets for the technology involved, not to exceed four, or more than one new equipment shelter; or

(3) the proposed modification would involve adding an appurtenance to the body of the support structure that would protrude from the edge of the support structure more than twenty feet, or more than the width of the support structure at the level of the appurtenance, whichever is greater, except that the proposed modification may exceed the size limits set forth in this paragraph if necessary to shelter the antenna from inclement weather or to connect the antenna to the support structure via cable; or

(4) the proposed modification would involve excavation outside the current structure site, defined as the current boundaries of the leased or owned property surrounding the structure and any access or utility easements currently related to the site.

Because this test relies on a “one-size-fits-all” approach that ignores any analysis of particular circumstances, we will refer to it as the “Absolutist Test.” As we have already shown, importing these absolute standards into Section 6409(a) would lead to predictable and significant problems in many contexts.⁷⁴

Moreover, the Absolutist Test also fails to measure substantiality against the underlying facility that the modification will affect. The Absolutist Test is lifted virtually verbatim from the portion of the Collocation Agreement focused on determining what would constitute a substantial change in the “size” of a “tower”; this explains the focus on vertical and horizontal additions. But Section 6409(a) applies to substantial changes in the physical dimensions of a tower *or* base station. The proposed rule does not address changes in the physical dimension of a tower (except as to height and extensions from the support structure), and does not address changes in the physical dimension of a “base station” *at all*. Consequently, the proposed rules

⁷⁴ See, *supra*, Section II.A.

allow a provider to add an equipment shelter of any size on a street corner regardless of its impact—so long as only one is added. It is hard to argue that replacing a small cabinet with a very large one in front of a house is not a “substantial” change, or that a numeric count adequately substitutes for measuring a change in physical dimension.⁷⁵

The difference between a test based on size alone, rather than physical dimension, is significant. Replacing an antenna in a hurricane zone with a design that catches high winds (and is subject to shearing) may not involve a change in “size” in any meaningful sense, but it does involve a substantial change in physical dimensions. The term “physical dimension” captures important factors such as the antenna’s shape and location. The proposed rules—fashioned to address only “size”—ignore this.

⁷⁵ To be sure, in some contexts—as with the alteration of an equipment cabinet within the fence line of a shielded facility—substantiality may turn less on the change in the size of an equipment cabinet and more on the impact on the shielding designed to hide the facility. But some of the facilities that the Commission purports to sweep in under the rules are in fact visible. A stealth “tree” is not stealthy if four equipment cabinets of any size can be added to the base. Likewise, the Commission purports to apply Section 6409(a) to DAS facilities and small cells. The industry often stresses that its DAS facilities and other small cells are unobtrusive. As it happens, the facilities that make up “small cells” and DAS systems can be small (or placed in a way so that the facilities are not visible or only marginally visible). That is why many communities in fact encourage and support DAS and small-cell deployment. But many local governments have received requests for placements that are obtrusive, or have had facilities modified in ways that are obviously significant in light of the placement of the facility – the Lafayette facility cited at the outset being one example. *See also*, CTC Report. The NPRM, at ¶ 35 and elsewhere, expresses concern for the “compliance costs” of DAS and small-cell deployments, but seems oblivious to the visual and other environmental impacts of the sheer number of these placements.

Compounding the problems, the Commission’s proposed rule does not clarify that any quantitative “substantial change” analysis must measure changes from the original dimensions of

a



“tower” or “base station,” not the dimensions after they have been modified.⁷⁶ The alternative would permit an applicant to make “substantial changes” without local approval, simply by making many multiple requests in rapid succession. As the Commission puts it, “successive increases of 10 percent could cumulatively increase the height of a structure by double or more.”⁷⁷

This is especially important to communities that have allowed substantial additions to facilities already. A good (if somewhat troubling) example is this collocation of Sprint and Clearwire facilities in Portland, Oregon. What began as a 24-foot pole in 2004 became the 61-foot pole pictured on this page, with associated and complex support structures. Additional extensions would add more complexity and risk, and would punish the community (and nearby residents) for allowing the earlier modifications.

⁷⁶ NPRM ¶ 120.

⁷⁷ *Id.*

The statute cannot be defeated through such gamesmanship.

(c) *The Absolutist Test serves a vastly different purpose under the Collocation Agreement than it would under Section 6409(a).*

That the Absolutist Test presents such striking problems shows how ill-suited it is to govern modifications under Section 6409(a). As it turns out, this poor fit is best explained by the test's origin: under the Collocation Agreement (and under the later-adopted NPA), the test used different terminology, and served a fundamentally different purpose than it serves here. In its guidance, the Wireless Bureau acknowledged that Congress "did not adopt" the Collocation Agreement's "substantial increase in size" test, but the Bureau nonetheless imported the Collocation Agreement's test into Section 6409(a) nearly verbatim, arguing that "the policy reasons" for excluding Section 6409(a) collocations "are closely analogous" to those that animated the Commission in the Collocation Agreement.⁷⁸ This is wrong. The policy reasons behind the Collocation Agreement's "substantial increase in size" test and Section 6409(a)'s "substantially change the physical dimensions" test are different in critical respects.

The Collocation Agreement's "substantial increase in size" test serves a modest purpose. While it limits the circumstances under which the Commission will automatically require an environmental assessment for a project, it requires Commission review in any event if "a member of the public, a SHPO, or the Council" reports that "that the collocation has an adverse effect on one or more historic properties."⁷⁹ Moreover, the Agreement only affects review by the Commission; it does not prevent state and local review. The complaint process assumes that the

⁷⁸ Public Notice, *Wireless Telecommunications Bureau Offers Guidance on Interpretation of Section 6409a) of the Middle Class Tax Relief and Job Creation Act of 2012*, 28 FCC Rcd. 1, 2 (2013).

⁷⁹ Collocation Agreement at III.A.4, IV. A.4.

public, state historic preservation officers, and local governments will be apprised of, and have an opportunity to raise issues regarding, a project that may affect environmentally sensitive areas or historically significant areas. The Collocation Agreement’s test therefore is *not* designed to capture all problematic applications. This is deliberate. The Commission explained that “perfection” was not its goal, and it admitted that it has fashioned a test under which “adverse effects will not be considered in some circumstances”:

We interpret these provisions to mean that, in formulating exemptions and prescribing processes, the Council and the federal agency need not ensure that every possible effect on a historic property is individually considered in all circumstances, but that they should take into account the likelihood and potential magnitude of effects in categories of situations. Indeed, doing so should advance historic preservation in the long run, consistent with the intent of the NHPA, by enabling all parties to focus their limited resources on the cases where significant damage to historic properties is most likely. Thus, the standard of review the Nationwide Agreement must provide is not one of perfection but one of reasonableness, taking into account both the likelihood that adverse effects will not be considered in some instances and the overall benefits to be obtained from streamlining measures.⁸⁰

This is not a criticism of the Commission. In the context of the National Historic Preservation Act, the Commission had at least some basis to assume that adequate protections would be afforded to historical sites given the overlapping processes involved.

But Section 6409(a) is different. It provides no back-up for local or state review—save perhaps the complaint process under the Commission’s rules. Moreover, the Commission’s

⁸⁰ *In re Nationwide Programmatic Agreement Regarding the Section 106 National Historic Preservation Act Review Process*, 20 FCC Rcd. 1073 ¶ 21; *see also id.* at ¶ 35 (“As discussed above, the NHPA does not require perfection in evaluating the potential effects of an undertaking in every instance. To the contrary, we believe Section 214 contemplates a balancing of the likelihood of significant harm against the burden of reviewing individual undertakings. Moreover, the provisions in the Nationwide Agreement for ceasing construction and notifying the Commission and other interested parties upon discovery of previously unidentified historic properties provides a safeguard in the unusual instances where the availability of an exclusion might otherwise cause an adverse impact to be overlooked.”).

proposed rules extend to facilities that the Collocation Agreement would not. There is no reason to believe that Congress intended Section 6409(a)'s "substantially change" test to be merely a "close enough" effort—to allow problematic projects "to be overlooked" in the interest of efficiency.⁸¹ The stakes are too high. Local permitting is not simply a categorical review of federal undertakings, unconcerned with substantive outcomes;⁸² it is often the final and essential substantive decision before new equipment can be placed near homes, in streets, and at the hearts of local communities. The Absolutist Test does not fit this setting. If it were adopted, the impact on the environment and on historical preservation will be predictable and significant.⁸³

(d) *The Commission's test would have serious adverse effects on deployment.*

Because the Absolutist Test is such a poor fit for Section 6409(a), if the Commission were to adopt it as a binding rule, it would have serious adverse effects on wireless-facility deployment. As the Commission anticipates,⁸⁴ this approach would strongly discourage local governments from approving initial "towers" and "base stations"—because those facilities could be expanded in ways that undermine local values later. This is particularly so if the rule allows "increases by increments"—20 feet on day 1, another 20 feet on day 2. The model also risks unleashing a public backlash against wireless facilities. Local officials do not plan their communities for their own benefit: they do so for the benefit of the larger community. But if the public perceives that wireless facilities are persistently trampling on cherished community

⁸¹ *Id.* at ¶ 35.

⁸² NPRM ¶ 25 ("Similar to NEPA, the NHPA does not require the Commission to engage in any particular preservation activities or prescribe any substantive outcomes").

⁸³ Murphy-Stillings Declaration at ¶ 15.

⁸⁴ NPRM ¶ 127.

values, such concerns will likely be voiced publicly, making wireless facility approvals more difficult for everyone.

No one benefits from that model. It does not help the industry, which will find that its requests to place “towers” and “base stations” face significant opposition. It creates uncertainty and prevents negotiated resolutions to siting disputes—which depend on the ability to define what will be sited where. And it certainly does not help local governments, who would find that they could not encourage the broadband deployment that they so desire.

(e) *Section 6409(a) does not require an Absolutist rule.*

The Commission asks whether Section 6409(a) can be understood and implemented in a way that does not discourage local governments from approving the initial siting of towers and base stations.⁸⁵ It can. Nothing in Section 6409(a) requires the Commission to define the term “substantially” in an absolutist way.

As suggested above, the term “substantial” should be understood to have its ordinary meaning—“important,” “notable” or “significant”—and a change’s significance must be measured against the facility that exists when the first Section 6409(a) request is received (not against the facility as it may have been modified by the first and any later requests). A proposed change in physical-dimension that would, *inter alia*, make a facility unsafe, render public streets or sidewalks less accessible or hazardous, damage a historically significant area or structure, expose a “stealth” facility, or otherwise defeat conditions that were key to the underlying facility would be substantial. These factors can be assessed on a case-by-case basis, and in many cases can and should be.

⁸⁵ NPRM ¶ 127.

But the Commission should also allow a local government and provider to agree upon and pre-approve specified modifications to wireless towers and base stations—effectively defining what is and is not substantial for the facility. By defining what changes will be “substantial” at the time that a local government approves an underlying facility, a local government and provider can streamline later modifications.

6. “May Not Deny and Shall Approve”

If the Commission adopts rules, it should recognize that the phrase “may not deny and shall approve” does not prevent a government from attaching conditions to a permit.

The Commission asks whether despite Section 6409(a)’s “may not deny and shall approve” language, local governments “may require any covered requests to comply with State or local buildings codes” and other local land-use requirements.⁸⁶ Specifically, it asks whether local governments:

- “can continue to enforce restrictions such as load-bearing limits”;
- “condition the approval of a modification on the underlying structure’s compliance with the hardening standards under TIA-222, Revision G”; and
- “deny an application for an otherwise covered modification if the structure, as modified, would not meet the fall zone or setback distance that its ordinance requires.”⁸⁷

The Commission also asks whether local governments must approve a modification of a tower or base station that has “legal, non-conforming status.”

⁸⁶ NPRM ¶ 124.

⁸⁷ NPRM ¶ 125.

The answer to all these questions is the same: Section 6409(a) need not and should not prevent local governments from conditioning their approvals of modification requests. The Commission cannot read the statute to put the public at risk. Indeed, local police powers are not preempted by federal law unless Congress clearly indicates otherwise.⁸⁸ Section 6409(a) makes no such indication. To the contrary, the statute is silent on whether local governments may, while approving a zoning request, attach a public-safety or other condition to it, or require a separate request and approval regarding public safety.

As suggested in the first section of these comments, the local permitting process considers a variety of interrelated questions, and may require a person wishing to install or modify a facility to obtain authorization from different federal, state, or local agencies, depending on the project and its location. Section 6409(a)'s legislative history demonstrates that Congress was focused exclusively on the classic *zoning* issue: whether a particular use is a permitted use.⁸⁹ This does not translate into a broad preemption of electrical codes, or allow modifications that could endanger low-flying military helicopters, harm endangered species, or change stealth facilities into undisguised towers. If Congress had intended to preempt these other local protections, it would have needed to be much more clear.

To be sure, under the definitions proposed in these comments, a change in physical dimensions that creates hazards or environmental harms, damages historical facilities, or exposes a stealth facility would be “substantial.” Put differently, if collocation, removal, or replacement of transmission equipment would violate load-bearing limits, undermine hardening standards, or violate fall zone or set-back distances, this would change a tower's or base station's physical

⁸⁸ *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947) (finding that police powers are not superseded by federal law unless that is “the clear and manifest purpose of Congress”).

⁸⁹ H.R. Rep. No. 112-399, at 133 (2012) (Conf. Rep.); NPRM ¶ 129, n.265.

dimensions substantially.⁹⁰ Section 6409(a)'s approval language would not apply. The same would be true if a proposed modification violates *any* condition or restriction that the State or locality “imposed as a prerequisite to its original approval of the tower or base station.”⁹¹ This includes a tower or base station that has “legal, non-conforming status.” It also includes “height, width, bulk, appearance, or other design characteristics intended to camouflage the deployment.”⁹²

But even modifications that involve no change in physical dimension can create significant hazards. If an application proposed to replace electric wiring with electric wiring of the exact same physical dimension but the wiring did not meet code requirements, it would still be necessary to condition the permit on code compliance. If a base station on a utility pole were replaced with facilities of the same size and configuration, but a significantly heavier weight, it would still be necessary to ensure that the pole was not overloaded.⁹³ As suggested above, it is hard to imagine that Congress intended to compel state and local governments to approve DAS installations of the sort that led to the Malibu Canyon fire—whether the overloading results from the initial installation, or from replacing existing equipment with heavier equipment. For this reason, the Commission must acknowledge that Section 6409(a) has a limited reach.

⁹⁰ NPRM ¶ 128 (“[S]hould modifications that alter a facility in a fashion inconsistent with local ordinance or with conditions on the structure’s use be considered to ‘substantially change’ its physical dimensions?”).

⁹¹ NPRM ¶ 127.

⁹² *Id.*

⁹³ As noted above, commenters do not believe that Section 6409(a) applies to utility poles. But the same concerns would apply to towers.

7. Section 6409(a) Procedural Issues.

The Commission asks a number of procedural questions. The Commission's rules should be clear that:

- a local government may require an entity to file an application for an “eligible facilities” modification; and
- Section 6409(a) does not prevent a local government from charging fees in connection with the review of an application.

The Commission proposes that Section 6409(a) permits a State or local government to require an application to be filed.⁹⁴ This is certainly correct. Of course, the only way to determine whether a project involves: (i) the collocation, removal, or replacement of “transmission equipment”; (ii) a modification of a “tower” or “base station”; or (iii) a “substantial[] change” in those facilities’ physical dimensions is for the applicant to describe and illustrate exactly what facilities it intends to place and where it intends to place them.

The Commission asks whether Section 6409(a) “permits and warrants Federal limits on applicable fees, processes, or time for review.” Unlike Section 332(c)(7)(B)(ii),⁹⁵ Section 6409(a) does not require a local government to act within a “reasonable period of time.” Therefore, the best reading of Section 332(c)(7) is that if an application concerns “personal wireless service” facilities, it is subject to Section 332(c)(7)’s shot clock. If it does not, no shot clock applies. If, however, the Commission believes that Section 6409(a) applies to facilities in addition to personal wireless facilities and permits it to address when a local government “must

⁹⁴ NPRM ¶ 131.

⁹⁵ 47 U.S.C. § 332(c)(7)(B)(ii),

approve” an application,⁹⁶ it should not go beyond the 90-day shot clock under Section 332(c)(7). Like that shot clock, the period should be extendable by the parties’ agreement, and a local government should be able to defend the reasonableness of any review that extends beyond a 90-day period.

Like Section 332(c)(7), Section 6409(a) says nothing about limiting local fees. The Commission has rightly never regulated fees under Section 332(c)(7), and there is no reason to believe that Congress intended the Commission to regulate such matters here. Indeed, compelling local governments to subsidize the review process would make what is already a statute that has significant Tenth Amendment problems even more problematic.

Finally, Section 6409(a) certainly does not empower the Commission to decide “which [local] officials may review an application,” or to order that elected officials may not make such decisions.⁹⁷ This would be a blatant and startling federalism intrusion. The federal government may not compel a State’s or local government’s leadership to rely on lower-level staff to make the sovereign entity’s decisions.

8. Section 6409(a) Remedies.

The Commission asks whether Section 6409(a) permits the Commission to “deem granted” a Section 6409(a) request if a local government either does not act on it within the Commission’s “shot clock” or denies the request improperly.⁹⁸ Section 6409(a) does not permit this. The Commission should find that:

- Section 6409(a) does not authorize it to deem an application granted; and

⁹⁶ NPRM ¶134.

⁹⁷ NPRM ¶ 132.

⁹⁸ NPRM ¶¶ 137-143.

- The courts should resolve siting disputes.

As the Commission recognizes, Section 6409(a) raises significant issues under the Tenth Amendment to the U.S. Constitution. The U.S. Supreme Court has read the Tenth Amendment to mean that the federal government “may not compel the States to enact or administer a federal regulatory program.”⁹⁹ Even in areas where the federal government has authority to act, the Constitution only authorizes the federal government to regulate individuals, not States.¹⁰⁰ Therefore, Section 6409(a) may neither commandeer local government officials to administer a federal “approval-granting” program, nor “deem” that they have done so. Read literally, Section 6409(a)’s language providing that a state and local government “shall approve” an application runs directly afoul of this provision. *Printz* suggests that if the federal government wishes to authorize the placement of intrusive and harmful facilities, it must do so itself—and take responsibility for those actions.¹⁰¹

The Commission cannot deem a proposal granted unless it has some permitting authority itself—and it has none. Even if it did, any remedy would need to comport with due process. The Commission asks whether a “deemed granted” remedy could apply automatically, simply because a provider notifies a local government that the provider believes the remedy is appropriate.¹⁰² This would turn due process on its head. A provider is not entitled to a remedy *before* the underlying issue is adjudicated in its favor. The provider may simply be wrong. For

⁹⁹ *Printz v. United States*, 521 U.S. 898, 918-19, 925-26, & 933 (1997) (quoting *New York v. United States*, 505 U.S. 144, 188 (1992)).

¹⁰⁰ *Alden v. Maine*, 527 U.S. 706, 714 (1999) (citing *New York v. United States*, 505 U.S. 144, 166 (1992)).

¹⁰¹ *Printz*, 521 U.S. at 925.

¹⁰² NPRM ¶ 141.

example, where a provider alleges that a local government has not acted within any Commission “shot clock,” the provider may be ignoring critical facts that caused the delay. Likewise, where a provider alleges that a local government has improperly denied a request under Section 6409(a), the provider may misunderstand the controlling standard or misapply it. Since it is the provider that seeks relief, it is the provider that must effectuate it, not the local government.¹⁰³

This review should occur in the courts. For requests that concern a local government’s alleged failure to act within a “reasonable period of time” on a personal-wireless-service facilities request, Section 332(c)(7)(B)(v) already establishes a forum to address these questions. The applicant can seek review in “any court of competent jurisdiction” and the court shall hear the case “on an expedited basis.”¹⁰⁴ For other requests, since Section 6409(a) does not include a judicial cause of action or specifically direct the Commission to adjudicate disputes, Congress is best understood to have elected to rely on existing avenues for relief. The provider therefore should follow the normal state-law procedure for challenging a local-zoning decision. Section 332(c)(7)’s reliance on judicial review has proven effective; there is no reason to depart from that model here.

The Commission instead proposes to allow those “alleging violations of Section 6409(a) along with any implementing rules” to file petitions for declaratory ruling with the Commission.¹⁰⁵ The Commission should reconsider for at least three reasons.

¹⁰³ *Id.*

¹⁰⁴ 47 U.S.C. § 332(c)(7)(B)(v).

¹⁰⁵ NPRM ¶ 142.

First, the Commission has indicated that it has no desire to operate as a “national zoning board.”¹⁰⁶ But deciding Section 6409(a) cases could require the Commission to re-visit these issues regularly. The Commission does not have the expertise and may not have the resources to assume this responsibility.

Second, Section 6409(a) disputes will often not turn on matters within the Commission’s expertise—technical and policy-related communications matters—but on questions much more mundane: fact-specific questions about a particular wireless tower or base station. Courts are better suited to resolve these questions.

Third, it is unfair to local government officials and the public to require them to travel to Washington D.C. each time that they must resolve a local siting matter under Section 6409(a). These questions are best resolved locally. As importantly, given the many zoning requests faced by local governments, disputes are more likely to be resolved expeditiously through existing avenues for addressing land-use issues than at the Commission.

Whatever rules the Commission adopts should apply prospectively, and without penalizing local governments that have approved wireless facilities. As suggested above, it would be counterproductive to punish local governments that have worked to develop innovative approaches to zoning by essentially changing conditioned approvals into approvals of facilities that were never considered and that often would not have been approved at all.

¹⁰⁶ NPRM ¶ 99.

III. SECTION 6409(A) HAS NO EFFECT ON A LOCAL GOVERNMENT'S PROPRIETARY ACTIONS.

The Commission should affirm its tentative conclusion that Section 6409(a) does not impact a local government's proprietary acts.¹⁰⁷ Like private property owners, local governments enter into lease and license agreement to allow parties to place antennas and other wireless-service facilities on local-government property. The Commission asks: "[W]ould Section 6409(a) impose no limits on such a landlord's ability to refuse or delay action on a collocation request?"¹⁰⁸ The answer is "yes"—no limits. Under a Tenth Amendment and Fifth Amendment analysis, compelling a local government to lease property to a particular entity would raise significant issues—and be inconsistent with a specific provision of the Communications Act which limits FCC authority over municipally-owned facilities.¹⁰⁹ Under a preemption analysis—which the Commission uses—the answer is the same. Federal preemption applies only to "state regulation," not to proprietary actions.¹¹⁰

Courts have consistently recognized that in "determining whether government contracts are subject to preemption, the case law distinguishes between actions a State entity takes in a proprietary capacity—actions similar to those a private entity might take—and its attempts to regulate. The former is not subject to preemption; the latter is."¹¹¹ Sections 253 and 332(c)(7) of

¹⁰⁷ NPRM ¶ 129.

¹⁰⁸ *Id.*

¹⁰⁹ See 47 U.S.C. § 224.

¹¹⁰ *Building & Construction Trades Council v. Associated Builders & Contractors*, 507 U.S. 218, 219 (1993).

¹¹¹ *American Airlines v. Dept. of Transp.*, 202 F.3d 788, 810 (5th Cir. 2000).

the Communications Act do not preempt “nonregulatory decisions of a state or locality acting in its proprietary capacity”¹¹²; neither does Section 6409(a).

The Commission’s tentative conclusion is also correct as a matter of policy. If Section 6409(a) were to interfere with a local government’s contracting decisions, the local government’s incentive to continue to lease or license its property would disappear. This would slow broadband deployment, and discourage the most efficient use of government property. For example, if Section 6409(a) allowed a wireless-service provider to ignore a local government’s contractual limits on where and how the company could place facilities, the local government could not afford to enter into such agreements: the risk would be too great. A provider who wishes to obtain collocation, removal, or replacement rights can do so, where appropriate, through negotiation. Section 6409(a) has no impact on the parties’ agreement.

The Commission also seeks comment on “how to ensure in which capacity governmental action is requested and in which capacity a governmental entity is acting” and “whether we need to address how Section 6409(a) applies to requests seeking a government’s approval in both capacities.”¹¹³ There is no need for Commission rules in this area, and the Commission is not

¹¹² *Sprint Spectrum v. Mills*, 283 F.3d 404, 421 (2d Cir. 2002); *American Airlines v. Dept. of Transp.*, 202 F.3d 788, 810 (5th Cir. 2000); *Qwest Corp. v. City of Portland*, 385 F.3d 1236, 1240 (9th Cir. 2004) (recognizing that Section 253(a) preempts only “regulatory schemes”); *Building & Construction Trades Council v. Associated Builders & Contractors*, 507 U.S. 218, 219 (1993) (“[P]re-emption doctrines apply only to state regulation”); *Omnipoint Communications v. City of Huntington Beach*, No. 10-56877 (9th Cir. Dec. 11, 2013).

¹¹³ NPRM at ¶ 129. One of the problems with the question is that it seems to assume that conditions that might be placed on a publicly-owned facility a locality leases would be substantially different in kind than the conditions it might establish in its regulatory role. That is not the case: as the owner of historic structures, for example, a local government would have a proprietary interest in preserving the character of the facility that is distinct from its regulatory interests. Similarly, a community like Tallahassee, which owns its own municipal electric system, would have a proprietary interest in preventing pole overloading that would lead it to

equipped to address these issues in any event. The lines between a local government's proprietary and regulatory decisions are firmly rooted in state law. If any difficult cases were to arise, the courts, not the Commission, would be best positioned to address these state-law questions.

IV. THE COMMISSION SHOULD NOT ADOPT ADDITIONAL RULES UNDER SECTION 332(C)(7).

The Commission should not adopt additional rules under Section 332(c)(7). The Commission lacks authority to adopt a “deemed granted” remedy, and the other rules it considered are unnecessary and counterproductive.

A. The FCC Cannot Adopt Deemed Granted or Presumptive Injunction Remedies for Section 332(c)(7) Violations.

The Commission seeks comment on whether it should “adopt remedies beyond the one provided in the 2009 Declaratory Ruling for violations of Section 332(c)(7).”¹¹⁴ The Commission lacks authority to do so.

As the Commission concluded in the *2009 Declaratory Ruling*,¹¹⁵ Section 332(c)(7) itself specifies the remedy available: an applicant may seek redress in a court of competent jurisdiction within 30 days of an act or failure to act on an application, as provided in Section 332(c)(7)(B)(v). The Commission had authority to interpret what constituted a “failure to act,” but in light of Section 332(c)(7)(A), the Commission could not expand upon the limitations in

establish conditions on pole use that may echo in critical respects the sorts of conditions that might be imposed by a regulatory agency responsible for pole safety.

¹¹⁴ NPRM ¶ 162.

¹¹⁵ *In re Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(B) to Ensure Timely Siting Review and to Preempt under Section 253 State and Local Ordinances that Classify All Wireless Siting Proposals as Requiring a Variance*, Declaratory Ruling, WT Docket No. 08-165, 24 FCC Rcd. 13994 (2009) (“2009 Declaratory Ruling”).

332(c)(7)(B)(i)-(iv). The Commission therefore considered and rejected the CTIA’s proposed remedies for a failure to act within a reasonable period of time: that the FCC deem an application granted and/or adopt a rebuttable presumption that the court should issue an injunction granting the application.¹¹⁶

The Commission now stresses that it is not “revisiting—or seeking comment in this proceeding—any of the matters decided by the *2009 Declaratory Ruling*.”¹¹⁷ We therefore understand that the Commission is not seeking to revisit the remedies. Nor is there any reason to do so. In rejecting CTIA’s proposed remedies, the Commission emphasized that “Congressional intent [was] that courts should have the responsibility to fashion appropriate *case-specific* remedies.”¹¹⁸ The Commission further explained that it is important for courts to do this:

[T]he case law does not establish that an injunction granting the application is always or presumptively appropriate when a “failure to act” occurs. To the contrary, in those cases where courts have issued such injunctions upon finding a failure to act within a reasonable time, they have done so only after examining all the facts in the case. While we agree that injunctions granting applications may be appropriate in many cases, the proposals in personal wireless service facility siting applications and the surrounding circumstances can vary greatly. It is therefore important for courts to consider the specific facts of individual applications and adopt remedies based on those facts.¹¹⁹

Nothing changes this analysis. The facts of individual cases *do* matter and it is important for the courts to adopt appropriate remedies in light of them. Most critically, the Supreme Court’s decision in *Arlington*¹²⁰ forecloses the possibility that the Commission has authority to determine the scope of available judicial remedies when a private right of action is available. As

¹¹⁶ *2009 Declaratory Ruling*, ¶ 39.

¹¹⁷ NPRM ¶ 152.

¹¹⁸ *Id.* (emphasis added).

¹¹⁹ *Id.*

¹²⁰ *City of Arlington v. FCC*, 133 S.Ct. 1863 (2013).

Justice Scalia noted in discussing *Adams Fruit Co. v. Barrett*, 494 U.S. 638 (1990), it is for the judiciary to determine the scope of judicial power vested by statutes establishing private rights of action, including the available remedies:

In that case, the Department of Labor had interpreted a statute creating a private right of action for migrant or seasonal farmworkers as providing no remedy where a state workers'-compensation law covered the worker. We held that we had no need to "defer to the Secretary of Labor's view of the scope of" that private right of action "because Congress has expressly established the Judiciary and not the Department of Labor as the adjudicator of private rights of action arising under the statute." *Adams Fruit* stands for the modest proposition that the Judiciary, not any executive agency, determines "the scope"—including the available remedies—"of judicial power vested by" statutes establishing private rights of action. *Adams Fruit* explicitly affirmed the Department's authority to promulgate the substantive standards enforced through that private right of action.¹²¹

The Supreme Court gave *Chevron* deference to the Commission's decision that it had authority to interpret what would be a reasonable period in which to act on a wireless siting application—a substantive standard enforced through resort to the courts. But under Section 332(c)(7)'s plain language, the Commission lacks authority to determine the scope of available judicial remedies or to create an administrative remedy.

B. The Section 332(c)(7) Shot Clock Should Permit Reasonable Moratoria To Allow Local Governments To Address Challenges Presented by New Technologies.

The NPRM proposes to find that the presumptively reasonable period of time for action on a wireless application should run regardless of any moratorium.¹²² That would be counter-productive. It also appears to presume that local governments do not adopt moratoria for good

¹²¹ *Id.* at 1871 n.3 (internal citations omitted).

¹²² NPRM ¶ 156.

reasons but as a delaying tactic. No evidence supports this.¹²³ Even the wireless industry recognizes that moratoria may be necessary and appropriate in certain circumstances. The industry and the FCC's Local and State Government Advisory Committee adopted guidelines addressing moratoria that state:

Moratoria, where necessary, may be utilized when a local government needs time to review and possibly amend its land use regulations to adequately address issues relating to the siting of wireless telecommunications facilities in a manner that addresses local concerns, provides the public with access to wireless services for its safety, convenience and productivity, and complies with the Telecommunications Act of 1996.¹²⁴

Implicit in this statement is the notion that moratoria can advance broadband deployment and speed the approval process by ensuring an orderly opportunity for the local authority to review its rules to ensure that they comply with federal law, address local concerns, and consider new issues. A moratorium normally allows a local government to modify ordinances that restrict placement of wireless service facilities in certain areas, or that establish siting preferences that ought to be reconsidered. For example, some ordinances require facilities to be placed on existing cell towers if a tower is available. While DAS facilities can certainly be placed on existing cell towers, and have been so placed, DAS providers often prefer to place antennas on utility poles or light standards that are not being used to support other wireless facilities. A local

¹²³ In its 2011 comments, PCIA claims that “many jurisdictions” have enacted moratoria “in an effort to avoid the Commission’s ruling altogether.” Comments of PCIA, *In re Acceleration of Broadband Deployment*, WC Docket No. 11-59, at 33 (July 18, 2011). But PCIA cites only one moratorium. *Id.* And it offers no verifiable proof that that the moratorium was instituted to avoid the ruling. Similarly AT&T’s 2011 comments make a similar claim and cite two moratoria, again without offering any verifiable proof that they were instituted to avoid the Commission ruling. Comments of AT&T, *In re Acceleration of Broadband Deployment*, WC Docket No. 11-59 at 15 (July 19, 2011). Even if these claims were true, they affect wireless siting in a miniscule portion of the tens of thousands of communities faced with wireless applications.

¹²⁴ Guidelines for Facilities Siting Implementation and Informal Dispute Resolution Process, <http://transition.fcc.gov/statelocal/agreement.html>

government may wish to eliminate or modify the preference for siting on large towers, and to encourage construction of DAS systems on utility poles and other structures in the street. But devising appropriate terms to create new opportunities for placement is not simple. A local government must, among other things, carefully develop standards that distinguish between obtrusive and unobtrusive installations, in a technologically neutral way. A moratorium allows a local government to visit issues in an orderly way, and avoids the real risk of discrimination that may arise if local governments were required to adopt and revise policies on an *ad hoc* basis.

Because moratoria can and do serve beneficial purposes, the Commission should indicate that the presumptively reasonable periods in the *2009 Declaratory Ruling* are tolled for moratoria. It is not reasonable to expect local staff to simultaneously engage in the review and update of their regulations and the review of applications. And engaging in the review process under the threat of litigation is likely to be counterproductive.

Setting a maximum cumulative time for tolling due to moratoria is not necessary. As the Guidelines recognize, a moratorium of 180 days may be needed to resolve the issues that need to be addressed but “[a]ll parties understand that cases may arise where the length of a moratorium may need to be longer than 180 days.”¹²⁵ A jurisdiction will typically want to consult with industry and the public as the Guidelines recommend before drafting revisions to the existing rules, and then will need to go through the legislative process of adopting the new rules. Where a provider has evidence that a jurisdiction using a moratoria to prohibit service, the provider can always bring a prohibition claim, as PCIA points out in its 2011 filing.¹²⁶ That is a more

¹²⁵ *Id.*, Guideline B.

¹²⁶ Comments of PCIA, *In re Acceleration of Broadband Deployment*, WC Docket No. 11-59, at 15 (Sept. 30, 2011).

appropriate approach than presuming that all moratoria are unjustified delaying tactics unless a local government proves otherwise.

Finally, there is no reason to adopt federal rules governing the applicability of moratoria to pending versus subsequently filed applications. Moratoria are not only used in connection with siting cell towers; moratoria may be used, for example, to limit development while a local government considers revisions to a general plan, or to address important legal changes with zoning implications—the legalization of marijuana being one example. Each state has well-developed law for determining whether a moratorium is valid and reasonable in duration.¹²⁷ This existing law provides more than adequate protection for a wireless-facilities provider that believes a particular moratorium is a delaying tactic. It is difficult to imagine how a federal rule would advance matters, as opposed to adding another potential layer of dispute.

C. A Preference for Municipal Property Is a Sensible Way To Streamline the Permitting Process.

The Commission asks whether ordinances that establish preferences for the placement of wireless facilities on municipal property unreasonably discriminate among providers of functionally equivalent services.¹²⁸ The Commission cannot reach such a *per se* conclusion for the reasons stated in the NPRM.¹²⁹

This view would seem to accord with the industry’s. PCIA has previously recognized that “siting on municipal property generally can have many benefits.”¹³⁰ It explains that there can be

¹²⁷ See, e.g. *Belle Harbor Realty Corp. v. Kerr*, 35 N.Y.2d 507 (1974).

¹²⁸ NPRM ¶ 160.

¹²⁹ *Id.* at ¶ 160 n.320 (citing arguments of the National League of Cities, *et al.*).

¹³⁰ Comments of PCIA, *In re Acceleration of Broadband Deployment*, WC Docket No. 11-59, at 35 (Sept. 30, 2011).

a variety of ways to describe municipal preferences, and only expresses concern about municipal preferences that “become effective mandates by establishing high hurdles to pursuing non-municipal siting options.”¹³¹ This necessarily depends on case-specific facts. No *per se* conclusion can be drawn about municipal preferences, and there is no reason for the Commission to address the issue here.

D. If the Commission Chooses To Address What Is a Complete Application, It Must Do So Recognizing the Complexity of the Siting Process.

The Commission seeks comment on whether it should clarify when a siting application is considered complete, and how that should be determined.¹³² There is no need to do this. The Commission refers to PCIA’s assertion that local jurisdictions delay the process by repeatedly asking for information, but PCIA’s one example does not even show this. The one example shows the local jurisdiction issuing two comment letters, one 21 days after the application was submitted, and a second three days after the provider’s first response was received. The provider filed four more response letters and had a meeting with the city at the provider’s request. This looks more like an example where it took a multiple responses to complete the application, not one where there were repeated requests for information. That accords with local jurisdictions’ typical experience. Wireless providers often submit applications without appropriate approvals and reviews, before critical elements of the design are known (FAA/environmental), and for properties that the applicant has no authority to use—wasting valuable public resources and delaying application completeness.¹³³

¹³¹ *Id.* at 36.

¹³² NPRM ¶ 154.

¹³³ CTC Report at 24.

The Commission also refers to AT&T's assertion that local jurisdictions delay the process by delaying when they deem an application complete, but it does not support that suggestion with a single actual example.¹³⁴ Local governments may in some cases allow an entity to submit information regarding a proposed project for preliminary review. For example, if a location requires approval from the federal government, a locality may choose to examine some aspects of the project so that processing can proceed more quickly if and when proof of required approvals are obtained and a full application is submitted. During this sort of informal review, the local government does not determine whether an application is complete or incomplete, much less treat itself as subject to the Commission's shot clock. Making this local review subject to federal rules will have a predictable result: because it penalizes cooperative approaches, local governments will accept and review information on a proposed project only when the provider can submit a complete application.¹³⁵

E. There Is No Need for Special DAS Rules Under Section 332(c)(7).

There is no need for the Commission to adopt special rules for DAS facilities under Section 332(c)(7). Any confusion with respect to Section 332(c)(7)'s applicability has been created by wireless-service-facility providers themselves, who have often been vague about whether DAS systems provide personal wireless service.¹³⁶ The legal analysis is not

¹³⁴ AT&T Comments, *In re Acceleration of Broadband Deployment*, WC Docket No. 11-59, at 14-15 (Sept. 30, 2011).

¹³⁵ Preliminary reviews do not harm providers; a provider obviously can wait until it has all the elements required for a complete application should it choose to do so.

¹³⁶ See, e.g., NextG Networks of California, Inc., Reply Comments in Support of Petition for Declaratory Ruling, WT Docket No. 12-37 (May 14, 2011).

complicated: if a DAS system is used to provide personal wireless services, it fits within Section 332(c)(7); if it does not, it does not.

DAS systems do typically have characteristics that distinguish them from other wireless installations. *First*, to the extent that DAS systems are placed within the rights-of-way, the provider may need to obtain a franchise—an authorization to occupy the rights-of-way—from the local government. These authorizations are distinct from land-use regulation, and have more in common with the leases a landowner may enter into with a wireless-facilities provider to allow the provider to occupy its property. No rules are necessary or appropriate to address the franchising process.¹³⁷

Second, DAS providers are typically installing a network of antennas (called nodes) and via a hub/headend, connect the remote facilities to the facilities of individual carriers. A community may receive applications for many sites during a short period of time, and construction may require review of trenching plans or fiber facilities that may be installed at the same time.¹³⁸ Each site may raise distinct issues (it is one thing to propose an addition to a utility pole in a commercial area; another to propose installing a new pole and an antenna in an underground area). Ultimately, local governments make decisions on an installation-by-installation basis.

¹³⁷ See 47 U.S.C. § 224 (limiting Commission authority to regulate access to poles and other property owned by municipalities).

¹³⁸ For example, the City of San Jose, California, issued T-Mobile 25 encroachment permits in 2011, and 36 in 2012. These permits are not for new locations, but for improvements to existing infrastructure.

Third, DAS systems often intrude upon critical public infrastructure—sidewalks and streets—and present hazards that are different in kind, and require additional analyses to ensure, *e.g.* that sidewalk access or sight lines at street corners are preserved.

Given these unique characteristics, there is no reason to think that the Commission’s 90 and 150-day shot clocks accurately reflect a reasonable time to process DAS applications. Certainly, the rules should not be changed on the assumption that it is *simpler* to review applications for installation of DAS or other small-cell technologies.

V. THE COMMISSION’S APPROACH TO SECTION 6409(A) MUST SHAPE ANY STREAMLINING OF THE COMMISSION’S HISTORIC PRESERVATION AND ENVIRONMENTAL REVIEWS.

The Commission proposes to further streamline its review of distributed antenna systems and small cells under the National Environmental Policy Act of 1969 (“NEPA”) and the National Historic Preservation Act of 1966 (“NHPA”).¹³⁹ Specifically, the Commission proposes to broaden the current exclusion from automatic NEPA review to reach collocations on an “existing building, antenna tower, or other structure.”¹⁴⁰ Similarly, under NHPA, the Commission asks whether it may expand the Collocation Agreement’s current approach to make a similar categorical exclusion from Section 106 review.¹⁴¹ The Commission also asks whether it may adopt a limited exemption from NEPA notification requirements for temporary structures.¹⁴²

There is substantial reason to suppose the sort of modifications that the Commission would exclude from its review create significant historical preservation and environmental

¹³⁹ NPRM ¶¶ 35-67.

¹⁴⁰ NPRM ¶ 38.

¹⁴¹ NPRM ¶ 53.

¹⁴² NPRM ¶ 78.

risks.¹⁴³ Whether the Commission may streamline its environmental review turns in significant part on how the Commission addresses Section 6409(a). Although neither NEPA nor NHPA absolutely *bans* projects that are environmentally or historically problematic, the statutes seek to ensure that, on balance, most projects are subject to appropriate scrutiny.¹⁴⁴ But local and state review are currently a critical part of the review process. These channels provide a “safeguard in the unusual instances where the availability of an exclusion might otherwise cause an adverse impact to be overlooked.”¹⁴⁵

If the Commission’s proposed Section 6409(a) rules prevent local governments from denying or conditioning modification requests that may raise serious environmental and historical-preservation concerns, however, the effect will be to remove an essential line of current NHPA and NEPA oversight. State and local officials would no longer be positioned to notify the Commission of cases, otherwise excluded, that require a “hard look.” This would require the Commission to narrow its exemptions, not expand them. Moreover, the Commission’s responsibilities are limited to “federal undertakings.” If the Commission reads federal law as mandating permitting of projects without regard to historical or environmental impacts, then *every* request under Section 6409(a) will become a federal undertaking, and subject to the NHPA and NEPA review by the Commission.

¹⁴³ Murphy-Stillings Declaration at ¶ 15.

¹⁴⁴ NPRM ¶ 18 (noting that NEPA “does not impose substantive requirements”); *id.* at ¶ 25 (“Similar to NEPA, the NHPA does not require the Commission to engage in any particular preservation activities or prescribe any substantive outcomes”).

¹⁴⁵ *In re Nationwide Programmatic Agreement Regarding the Section 106 National Historic Preservation Act Review Process*, 20 FCC Rcd. 1073 at ¶ 35 (2004).

In sum, the Commission certainly may not *expand* its current NHPA and NEPA exclusions, as it proposes, should it read Section 6409(a) to preempt state and local environmental and historical preservation laws. Rather, the Commission would need to evaluate environmental and historical impacts in far more detail than it has done so far, before defining what projects are and are not subject to categorical exclusions. And the Commission would need to ensure that adequate notice will be provided in a timely way for all activities subject to the categorical exclusion so that complaints may be filed with the Commission.¹⁴⁶ The exclusions are far less troubling if the Commission reads Section 6409(a) to maintain the current balance of state, local, and federal authority.

¹⁴⁶ NEPA does not impose substantive environmental mandates, but it does require federal agencies to establish procedures to account for the environmental effects of certain proposed actions. See *Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752, 756-57, 124 S. Ct. 2204, 159 L. Ed. 2d 60 (2004). In particular, for “major Federal actions significantly affecting the quality of the human environment,” agencies must prepare an EIS that examines, among other things, the adverse environmental effects of a proposed action and potential alternatives. 42 U.S.C. § 4332(2)(C); *Am. Bird Conservancy, Inc. v. FCC*, 516 F.3d 1027, 1032 (D.C. Cir. 2008). The same considerations apply to the NEPA notification exclusion for temporary facilities. Local governments can support that exclusion, provided that local governments retain the ability to address—substantively—any problems that these facilities present, and to otherwise raise concerns with the Commission. Temporary facilities can present significant safety issues, and can permanently harm sensitive areas. Local governments recognize the need for and typically permit such placements outside of the standard zoning process, subject to rules designed to ensure that the antennas are installed and removed safely, and properly secured and placed to avoid harm to the public and the environment (temporary fencing may be required, for example, to keep the public away from hazards presented by the installation). Local governments retain important interests in controlling these structures.

VI. CONCLUSION

The Commission should adopt a sensible approach to modifications of wireless towers and base stations under Section 6409(a). The Commission's proposed rules do not qualify. We urge the Commission to reconsider its proposed rules in light of these comments.

Respectfully submitted,

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February 3, 2014

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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.

In the Matter of

Acceleration of Broadband Deployment by
Improving Wireless Facilities Siting Policies

Acceleration of Broadband Deployment:
Expanding the Reach and Reducing the Cost of
Broadband Deployment by Improving Policies
Regarding Public Rights of Way and Wireless
Facilities Siting

Amendment of Parts 1 and 17 of the Commission's
Rules Regarding Public Notice Procedures for
Processing Antenna Structure Registration Applications
for Certain Temporary Towers

2012 Biennial Review of
Telecommunications Regulations

WT Docket No. 13-238

WC Docket No. 11-59

RM-11688 (terminated)

WT Docket No. 13-32

JOINT DECLARATION OF EMILY STILLINGS AND JANET MURPHY

We, Emily Stillings and Janet Murphy, declare as follows:

1. We are Historic Preservation Consultants for Murphy Stillings, LLC, in West Palm Beach, Florida.
2. We have reviewed the FCC's Notice of Proposed Rulemaking, including the proposed rules attached at Appendix A.
3. Based on our experience, we believe that the FCC's proposed rules would adversely affect local historic preservation efforts in a significant way. We explain our views in this declaration.

A. Background and Experience

4. Emily Stillings has a Bachelor of Science degree in architecture from The Catholic University of America, and a Master's degree in urban and regional planning from

Florida Atlantic University. Janet Murphy has a Bachelor of Arts degree in history from The University of Virginia, a Master of Arts degree in urban planning and historic preservation from The University of Maryland, and a Master of Arts degree in art and architectural history from Virginia Commonwealth University.

5. We have over 38 years of experience working on historic preservation issues for local governments and private developers. Our work consists of: designating historic structures and districts locally and to The National Register of Historic Places, reviewing certificate of appropriateness applications for alterations and additions to historic structures and properties within historic districts, preparing applications for tax credit projects, and Section 106 reviews. As part of our work, we have reviewed proposed modifications to wireless facilities on historic buildings.

B. Local Historic Preservation Requirements

6. Many local governments have historic preservation laws that review changes to historic districts, buildings, or structures to determine whether the changes are in the public interest. *See, e.g.*, District of Columbia Code § 6-1105; Palm Beach Code § 54-71.
7. Modifying wireless towers and base stations is among the activities that are subject to review for their impact on historical areas.
8. Problematic proposals are typically handled by a certificate of appropriateness application to the governing historic preservation review board. These boards work to minimize the negative visual impact on the historic structure or to the district.
9. Most local historic preservation requirements do not exempt small changes automatically. This is because just as a large addition can alter a historic setting, a series of relatively small changes can also erode significant historic features. For instance, changes to a

window muntin pattern or roofing material can significantly alter the historic character of a building.

10. Context is critical in historic review matters. In some cases, proposed changes can be accommodated with simple modifications. In other cases, they cannot. Changes to historic buildings can be appropriate if they do not detract from the original design and features of the building. Modifications to the proposed changes may be necessary to keep the historic integrity intact. For example, a proposed garage addition may need to be redesigned to be side-loading versus front-loading.

C. The Effect of the FCC's Proposed Rules

11. The FCC's proposed rules do not appear to evaluate whether a change to a tower or base station in a historic area is meaningful in context. Instead, the rules state that a modification would qualify as a "substantial change" only if:

- 1) the proposed modification would increase the existing height of the support structure by more than 10%, or by the height of one additional antenna array with separation from the nearest existing antenna not to exceed twenty feet, whichever is greater, except that the proposed modification may exceed the size limits set forth in this paragraph if necessary to avoid interference with existing antennas; or

- 2) the proposed modification would involve the installation of more than the standard number of new equipment cabinets for the technology involved, not to exceed four, or more than one new equipment shelter; or

- 3) the proposed modification would involve adding an appurtenance to the body of the support structure that would protrude from the edge of the support structure more than twenty feet, or more than the width of the support structure at the level of the appurtenance, whichever is greater, except that the proposed modification may exceed the size limits set forth in this paragraph if necessary to shelter the antenna from inclement weather or to connect the antenna to the support structure via cable; or


4) the proposed modification would involve excavation outside the current structure site, defined as the current boundaries of the leased or owned property surrounding the structure and any access or utility easements currently related to the site.

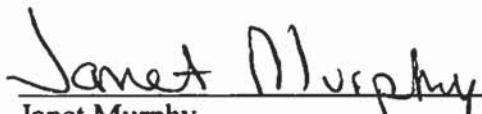
12. The FCC proposes to define a “base station” to include not just base-station equipment, but “a structure that currently supports or houses an antenna . . . or other associated equipment.”
13. The FCC’s proposed rules also do not clarify that local governments can otherwise condition their approvals on historic or other concerns.
14. The Commission’s rules would have very troubling effects.
 - a. Some historic districts have relatively low-rise buildings, where antennas can be placed on rooftops without altering a neighborhood’s appearance. But the FCC’s rules would present real problems in these areas. Take a neighborhood with a historic rowhouse supporting an antenna. The FCC’s rules might be read to allow the rowhouse itself to be changed by the equivalent of one additional story (20 feet). This would significantly alter the streetscape and the historic character of the neighborhood.
 - b. Even if the structure itself could not be changed, the rules could be read to allow a provider to expand the antenna with a 20-foot vertical addition plus 4 equipment cabinets and an equipment shelter. This could be problematic in a range of settings. Not only would it negatively impact the specific historic structure’s integrity it would also negatively impact the surrounding vista and viewshed. The context of a historic structure is important to its historic integrity. Increasing the height of the antenna and adding equipment cabinets and shelters would significantly alter that context.

- c. In other cases, an existing antenna can be hidden within a historic facility, such as a church steeple. But adding 20-foot appurtenances and multiple new equipment cabinets would defeat the effort to hide these facilities, and risk fundamentally changing historic areas. In addition, to the extent that historic materials need to be replaced, adding antennas could destruct and alter historic structures. Even a small change, then, could have a significant impact on the structure.
 - d. Many historical structures can be damaged by drilling and construction work. The work not only can damage the structure at the point of attachment, but the work may cause vibrations that affect other portions of the structure. Local governments therefore often condition such work on compliance with local standards. The Commission does not recognize that such conditions would be enforceable.
15. The Commission lifts its proposed “substantial change” standard from the Nationwide Collocation Agreement, which streamlines the Commission’s obligations under the National Historical Preservation Act. In our view, a “20-foot/4-cabinet rule” may not be illogical in that setting to the extent that it primarily addressed large cell “towers” and was subject to other safeguards that could subject an otherwise-exempt application to Section 106 review. The FCC’s standard makes no sense when it is applied to non-towers, and without other safeguards to address requests that, in context, present historic concerns.
16. If local governments are not allowed to review and make enforceable decisions on the expansion of antennas and communication equipment on many important historic structures, neighborhoods and vistas will be substantially altered to the detriment of the surrounding communities.

17. Based on our experience with historical structures and areas, even small changes to wireless facilities can have a substantial impact on historical neighborhoods and historical structures in many contexts, and the proposed rule as written, and read literally, can be expected to have a substantial adverse impact on many existing installations in historical neighborhoods and on historical structures.

We declare under penalty of perjury that the foregoing is true and correct to the best of our knowledge and belief, and that this declaration was executed on January 31, 2014, at West Palm Beach, Florida.


Emily Stillings


Janet Murphy

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Engineering Analysis of Technical Issues Raised in the FCC's Proceeding on Wireless Facilities Siting

February 2014

Prepared by CTC Technology & Energy

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1. Introduction

This report presents an engineering assessment of technical issues related to local government review of applications for wireless facility siting, including new installations, modifications, and collocations, with a focus on newer technologies that do not require the sort of large towers that were typical at the time the FCC issued the Programmatic Agreements. In the sections that follow, we address the following issues from an engineering perspective:¹

1. Distributed Antenna Systems (DAS) and small cell technologies encompass a wide range of antenna and equipment sizes and degrees of impact on the surrounding community. With the increasing need for wireless capacity and coverage to enable mobile broadband services, we anticipate these technologies will see extensive new deployments.
2. In our experience, local review processes have led to constructive approaches to providing wireless service in neighborhoods, environmentally sensitive areas, and historically protected areas, and have resulted in solutions that are well geared to the local interests while permitting deployment. The effectiveness of these approaches depends on the ability of localities to limit types of modifications that can be made to an installation.
3. Experts in the wireless field have clearly defined the meaning of terms such as “tower” and “base station.” Maintaining consistency with the common understanding of those terms leads to appropriate distinctions in the level of review that is required for various activities in wireless deployment.
4. Two of the most important purposes of local review are to protect the safety of the public and facilitate deployment of services to the community.
5. Review processes vary among communities based on local needs. Based on these considerations, localities determine appropriate review under different scenarios such as: (1) new structure, (2) construction, (3) collocation on existing structures, or (4) modification to existing facilities.
6. Local processes are designed with consideration of public safety, zoning and planning requirements, public input, and the need for consistent and predictable outcomes.
7. In our experience, processes and outcomes are optimized where wireless providers and localities coordinate, work collaboratively, and keep each other apprised of future plans.

¹ Our analysis relates to 47 CFR Parts 1 and 17 [WT Docket Nos. 13–238, 13–32; WC Docket No. 11–59; FCC 13–122], Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies, Proposed Rule, Federal Communications Commission. Federal Register, Vol. 78, No. 234, December 5, 2013.

8. In our experience, one significant source of delay in the wireless approval process is applicants filing incomplete or inaccurate applications, requiring the applications to be sent back to the applicant and consuming valuable time and resources.

This report was prepared by the engineers of CTC Technology & Energy based on our experience designing, planning, monitoring, and evaluating the construction and performance of wireless and wired communications networks in communities nationwide.

2. DAS and Small Cell Technologies: Coverage Features, Structural Dimensions, and Deployment

Distributed Antenna Systems (DAS) and small cell networks are two alternatives to traditional cellular towers and antennas. While the technologies are designed for deployment in areas that would be difficult or impossible to adequately serve with traditional large cell sites, they still require equipment cabinets, cabling, antennas, power and other infrastructure throughout a community—creating new circumstances that require local review. Moreover, DAS and small cell networks are in the initial stages of deployment; once they are more widely deployed, localities will see equipment of varying sizes and shapes installed in locations where wireless technology has typically not been deployed—including in residential neighborhoods and environmentally sensitive areas.

The typical cellular tower design is comprised of an antenna mounted on the support structure and connected by cabling to transmission equipment and power supplies. The base station is typically located in a building adjacent to the tower. The tower does not form part of the base station. Backhaul facilities are not regarded or treated as part of the wireless communications facility.

Distributed Antenna System (DAS)

DAS are designed to provide cellular coverage using many small antennas instead of a traditional tower, monopole, or other tall support structure with large high-power antennas. In our experience, carriers consider a DAS for scenarios such as:

1. Service in areas where zoning or aesthetics do not allow for a large tower, such as residential neighborhoods or public parks
2. Service in environmentally sensitive areas, where placement of a large tower is prohibited
3. Service in large building complexes, including stadium spaces and airports, where many antennas are needed in a relatively small area for high capacity. (Many in-building DAS are fed from an antenna mounted on the exterior of the structure.)
4. Service where the area to be covered is a narrow corridor or has terrain obstructions, such as a canyon, shoreline, or tunnel

In our observation, all of these scenarios are likely to increase in frequency, given the growing demand for mobile broadband nationwide. The increased need for capacity in neighborhoods and along major roads will lead to more antennas in residential areas. The increased need and expectation for wireless services in office buildings, as well as the use of video and other

intensive applications in those areas, will lead to in-building DAS. And the push to provide service or improve service in remote or poorly served areas will lead to more corridor DAS.

DAS deployment is in its beginning stages, and we anticipate that it will continue to grow. The deployment will no doubt be driven by newer high-speed services requiring higher signal levels in close proximity to users.

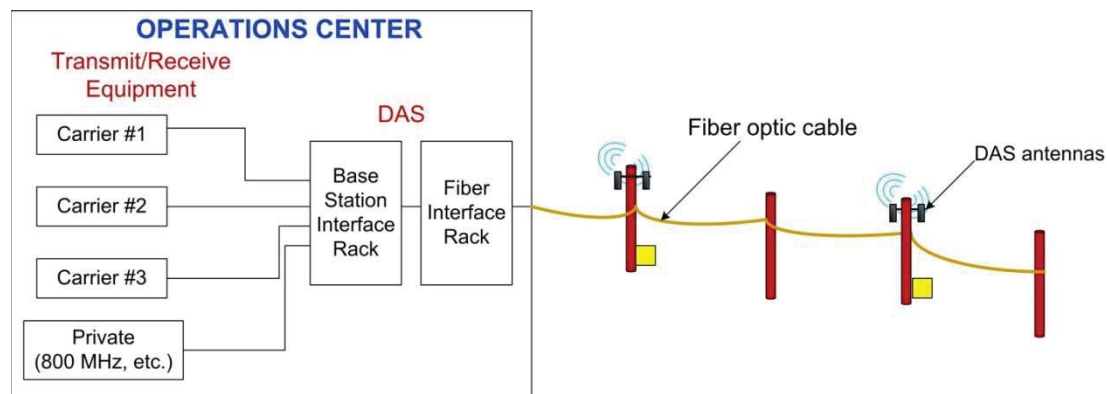
Until recently, DAS technology was a niche for aesthetically sensitive areas that needed improved service. We are now observing a significant increase in DAS siting applications, information sessions for localities by carriers, expansions of DAS deployments to add carriers, and collocations of antennas on existing DAS.

From an engineering perspective, DAS infrastructure presents many of the same potential community impacts as traditional cellular tower and antenna sites. In our experience, a DAS may itself be “small” as compared to a 150-foot tower, but the placement of the DAS components can have just as significant an impact on a community. The material that follows presents specific examples of these impacts.

A DAS typically consists of a master “headend” connected over cable (typically, a fiber-optic cable) to several antennas, often referred to as nodes. At the remote node, there may be power supplies and some equipment. In our experience, one common scenario is for the headend to be located in a small building and the antennas to be located on utility poles, light poles, or similar structures within a few miles of the base station.

Some DAS are single-carrier systems. Others serve multiple providers over the same facilities. In a “neutral host” DAS, a single entity operates the DAS on behalf of several providers, all of whom pay rent to the operator. (This is similar to the operation of cellular towers, with rings of antennas belonging to various carriers.) In this scenario, the tenant carriers contract with the host to configure the antennas and infrastructure for their needs. The tenant carriers may connect with the DAS at the headend location and site their base station equipment at the headend. This configuration is illustrated in Figure 1.

Figure 1: Typical Neutral-Host Distributed Antenna System (DAS)



But it is important to recognize that the DAS system provider may not—and often is not—actually engaged in the provision of wireless services. A neutral DAS provider may receive signals at an antenna it operates and transmit those signals to a DAS headend it controls, which in turn routes the signals to and from the base station equipment operated by the actual wireless service providers. The antenna is remote from what would typically be counted as the “base station,” which is the provider transmission and reception equipment at the DAS headend.

A DAS headend is shown in Figure 2. The size of the headend, as with the antennas, depends on a range of factors. These include the number of wireless carriers it serves, the number of frequency bands it supports, and the number of antennas to which it connects. We have observed standalone DAS headend facilities ranging from the size of individual equipment shelters to the size of small central office facilities.

Figure 2: DAS Headend Located Adjacent to a Fire Station



DAS deployments range in scale based on whether the DAS is serving multiple carriers and/or multiple frequency bands. A DAS can be installed in a manner that is relatively unobtrusive so long as permits authorizing installation can limit size and height limits and set placement requirements. However, in our experience, some carrier proposals for headend changes, vertical or horizontal extensions, or additions of on-site equipment storage facilities could substantially change the character and impact of the installation.

The size of DAS components also varies. DAS antennas range in size from small whip antennas (Figure 3) to larger antennas or radomes comparable in size to monopole site panel antennas (Figure 4) or even an array of 8-foot panel antennas. However, the antenna size alone does not determine the size of the deployment because providers often require extensions to existing support structures, either (1) to obtain clearances from electrical wires where there is a plan to use an electrical utility pole for support or (2) to obtain a desired height for transmission. In some places, we have seen DAS providers install or seek to install 65-foot poles in front of

residential dwellings where the typical utility pole is 30 to 35 feet high (Figure 10). And because the antennas will be part of a system, a system proposal may involve placement of 65-foot poles every quarter mile, with the attendant impacts on the surrounding neighborhood (which includes the impacts on accessibility and safety associated with higher poles).

Individual DAS nodes require cabinets for batteries, demarcation with the fiber, and the RF modules at each pole or streetlight location. It is not unusual to see cabinets as large as 27"x22"x18" and weighing up to 60 pounds.

In our experience, a remote DAS node may use smaller and less obtrusive facilities but may also use large and much more intrusive facilities that require significant additional support for poles.

Figure 3: Small DAS Antenna for Single Carrier Use



Figure 4: Large DAS Antenna for Multiple Frequency Bands



As with conventional cell towers, we have seen individual DAS antenna locations become crowded with equipment as multiple wireless carriers deploy their own DAS antennas on the same well-situated poles.

In our experience, DAS installations also typically replace or expand the utility pole and add cabinets on the pole below the antennas. Fiber-optic cable attached to the utility poles connects the nodes back to the headend.

In underground areas, we have seen surface-mounted cabinets and underground vaults used instead of pole-mounted cabinets. Sometimes node equipment is concealed in stealth structures such as a fake rock. In those installations, the fiber-optic cable is installed underground.

Small Cell Technology

Small cell (also called microcell or picocell) is another new technology that wireless providers are using to add or improve service. Relative to DAS, small cells are even earlier in their

development cycle. We have observed few deployments so far, mostly in small area trials. However, wireless carriers have engaged localities in discussions about their plans and have begun to design the networks.

Microcells often create lower visual impact than DAS. This is because they typically use smaller antennas and require less ancillary equipment to operate. However, in our experience, small cell installations include many radios and cabinets—meaning that the full installation is not necessarily small and that all the pieces of an installation can collectively have a noticeable impact.

An example microcell installation is a set of outdoor radios, each approximately 18"x5"x5" and weighing 40 pounds, mounted at the top of the communications space on a utility pole. One radio is needed for each band (e.g., 700 MHz, PCS, AWS). Additionally, each radio supports only one type of technology (e.g., 3G or 4G—and no voice/2G). Each radio serves only one wireless carrier. Microcell installations also typically require a power cabinet with backup batteries and a network router on the pole or in a surface cabinet or vault. The power cabinet is approximately 25"x17"x8".

Figure 5: Simulated Microcell Equipment Sizes from Verizon Wireless Presentation to City of Portland, Oregon Staff



Some carriers use a single cabinet to house what other carriers put in multiple cabinets. One microcell deployment that aggregates these components uses a cabinet approximately 60"x22"x17" and 130 pounds.

From an engineering perspective, carriers choose small cell technology for a range of reasons. As with DAS, we see small cells selected for areas where the carrier needs to increase wireless capacity while minimizing the visual impact of an antenna. Because microcells are lighter systems than DAS, each device is less versatile and usually less powerful than a DAS antenna. Each has a relatively short range (600 feet—or four utility pole spans) and is limited in the number of users that can be connected (16 to 32).

Given the short range and the limitation to a single wireless carrier or band, small cells need a proliferation of radios and cabinets to serve an area. The interval between cells will be small—potentially with radios placed on every few utility poles or light posts—for each wireless carrier.

It is useful to compare the impact of small cell deployment on the right-of-way to the impact of existing utilities. In this way, a small cell deployment with a cabinet every several poles is comparable to a cable TV system, with similarly sized power supplies, amplifiers, or passive devices at comparable intervals.

3. Potential Impact of a Uniform Rule Eliminating Local Review

A central issue facing the FCC is what constitutes a “substantial change” in the physical dimensions of a base station or tower. Based on our experience working with local government clients over the past 15 years, it is our professional opinion that a uniform, absolute numerical standard for expansions will not properly measure what a “substantial change” might be. What constitutes a substantial change depends on the community and the circumstances of a given wireless facility site.

We have seen many localities make extensive efforts over the years to balance consumer demand for wireless service with reducing the impact of installations and protecting the nature of residential communities and historic areas. In our experience, such efforts include:

- Tailoring facility needs to be compatible with their surroundings
- Using existing structures (such as radio towers, water towers, or buildings)
- Providing attachment space on government buildings (such as fire stations, stadium lights, and so on) to enable service in neighborhoods
- Encouraging and coordinating collocation
- Promoting use of “stealth” designs (such as screened antennas and disguises in the forms of flagpoles, trees, steeples, and cacti)

Allowing a carrier to arbitrarily expand an installation by some fixed distance, such as the proposed 20 feet in any direction without any other stipulations, as considered by the NPRM, would alter the entire character of many (if not all) sites we have reviewed over the past 15 years.

Examples of the potential aesthetic and public safety impact of a uniform rule eliminating local review include the following types of sites we have reviewed in recent years:

1. Stealth antennas concealed in flagpoles, which would no longer be stealth if additional antennas were installed without consideration of the nature of the installation
2. Antennas that were required by local authorities to be painted in the same color as the surrounding structure, which would no longer provide the visual shielding if other unpainted antennas were added in proximity
3. Antennas on a few-story building, where the addition of a 20-foot structure on top would effectively add two stories to the height and seriously impact the aesthetics
4. Antennas concealed in a sign façade, where the addition of a 20-foot structure would eliminate the benefit of the original stealth installation

5. Antennas that were permitted in a residential or sensitive area conditioned on their limitations in height

The photographs below show existing sites as they were approved by various local governments.

Figure 6: Potential Impact of Uniform Rule, Case 1 – Flagpole



Figure 7: Potential Impact of Uniform Rule, Case 2 – Coloring of Antennas



Figure 8: Potential Impact of Uniform Rule, Case 3 – Top of Building



Figure 9: Potential Impact of Uniform Rule, Case 4 – Antennas Hidden in Sign



Figure 10: Potential Impact of Uniform Rule, Case 5 – Residential Neighborhood



It is useful to consider the impact of adding 20 feet to ascertain the impact of this type of modification on the structure. We provide in Figure 11 a simulation of adding antennas and the required reinforcement structures and cabinets to the pole in Figure 10. It is clear that a structure that is barely acceptable in this residential setting becomes outrageously large, because in this setting 20 feet is not a minor modification.

Figure 11: Simulated Addition of Antennas and Reinforcing Structure to Case 5 – Residential Neighborhood



The following simulations illustrate additional scenarios.

Figure 12 illustrates historic 50-foot-high silos with six panel antennas painted to match the exterior surface (and thus minimize the visual impact); Figure 13 is a simulation of adding an approximately 20-foot-high pole-mounted antenna array.

Figure 12: Potential Impact of Uniform Rule, Case 6 – Historic Site



Figure 13: Simulated Addition of Antennas to Case 6 – Historic Site



Figure 14 is a photo of Simeon T. Toby's Bank Building in the Columbia City Historic District of King County, Washington. The blue arrows point to the current location of antennas. Figure 15 simulates the potential impact of collocation by superposing photos of actual rooftop installations

Figure 14: Potential Impact of Uniform Rule, Case 7 – Historic Site



Figure 15: Simulated Addition of Antennas to Case 7 – Historic Site



Figure 16 illustrates a 100-foot monopole disguised as a flagpole in Prince George's County, Maryland. In its current state (below left), the stealth design conceals six panel antennas. The simulation on the right shows the potential impact of a 20-foot extension.

Figure 16: Potential Impact of Uniform Rule, Case 8 – Stealth Monopole Site



Figure 17 below shows a two-story office building in Montgomery County, Maryland; the building supports antennas from three carriers—all permitted by Special Exception and either concealed within the faux screening atop the penthouse, or painted to match the exterior of the screening or brick walls. Figure 18 is a simulation of the addition of a tower-like structure to support collocated antennas approximately 20 feet above the existing antennas.

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Figure 17: Potential Impact of Uniform Rule, Case 9 – Stealth Rooftop Site



Figure 18: Simulated Addition of Antennas to Case 9 – Stealth Rooftop Site



As engineers in the broadband field, we are concerned that allowing modifications to an approved site without additional review will disincentivize installation of small, adequately concealed antennas, because communities will justly fear that those sites could be arbitrarily modified into obtrusive large-scale structures. As a matter of simple prudence, new sites that might have been approved conditionally would face resistance for fear of the resulting antenna sprawl.

In our engineering judgment, what qualifies as a “substantial” change from a design review standpoint depends on context. For example, adding a 60-pound cabinet to a steel lattice tower is dramatically different than adding the same cabinet at the midpoint or top of a 45-foot wooden pole—and this in turn may require adjustments that significantly affect the visual profile of the facility.

4. Definitions of Terms

The engineers of CTC Technology & Energy have designed, planned, monitored, and evaluated the construction and performance of wireless and wired communications networks nationwide for more than 15 years. We are familiar with the common usage of industry terminology, why that terminology is used, and why it may evolve. In this section, we provide an engineering perspective on the meaning of the terms “tower,” “pole,” and “base station,” and why it is important that those terms are used in a uniform way.

Tower

Tower is defined in the FCC Antenna Collocation Programmatic Agreement as follows:

A tower is any structure built for the sole or primary purpose of supporting antennas and their associated facilities used to provide FCC-licensed services. A water tower, utility tower, or other structure built primarily for a purpose other than supporting FCC-licensed services is not a “tower” for purposes of the Agreement, but is a non-tower structure.²

We believe that this definition, which has governed in this setting for more than 12 years, is not random or antiquated. A distinction between tower and “non-tower structure” is important, because even though many non-tower structures may be excellent options for locating wireless antennas, they have a different architectural history, have been constructed in a different context, have other stakeholders and owners from a business perspective, and have different issues from a safety standpoint than structures that are “built for the sole or primary purpose of supporting antennas and their associated facilities.”

Although a new tower may have a larger impact than a non-tower structure and therefore may call for a different level of review, the non-tower distinction is important for determining the correct level of review for collocation and minor modification. The non-tower structure may be embedded in a neighborhood, on a building, or in the public right-of-way, whereas a tower is, from the beginning, an object set aside and more distinct from its surroundings.

Therefore, based on our experience with both of these classes of structures, we believe it is important to maintain a definition of tower that reflects the limited set of structures to which the definition has long applied. Under this approach, a utility pole would not be a tower—just as it has not been a tower under the programmatic agreement.

Base Station

Base station is another engineering term with a distinct meaning. As noted in the NPRM, the classical definition of base station is a land station in a land mobile service. With the evolution

² “Antenna Collocation Programmatic Agreement,” Fact Sheet, Federal Communications Commission, Jan. 10, 2002, http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-02-28A1.pdf

of technology this definition has become broader; it is now used in the industry to encompass its role in cellular telephone and mobile broadband networks. However, the term still corresponds to a distinct part of the 3G and 4G architectures and is not generally used in a random, ad hoc way to apply to any and all fixed parts of a cellular network.

The European Telecommunications Standards Institute (ETSI), the 3GPP standards body that specifies GSM and LTE technologies, defines important technical terms in the 3G and 4G environment in an evolving document. In the current 2013 version, “base station” is defined as:

... a network element in radio access network responsible for radio transmission and reception in one or more cells to or from the user equipment. A base station can have an integrated antenna or be connected to an antenna by feeder cables. In UTRAN it terminates the I_{ub} interface towards the RNC. In GERAN it terminates the Abis interface towards the BSC.³

In plain English, this means that, in a macro cell site, the base station is connected to the antenna and is part of the equipment in the adjacent shelter or in the attached building. In a DAS, to the extent that any portion of the system may be considered a “base station,” the base station is limited to the radio transmission and reception equipment in the headend building.

³ European Telecommunications Standards Institute, “Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Vocabulary for 3GPP Specifications,” 3GPP TR 21.905. http://www.etsi.org/deliver/etsi_tr/121900_121999/121905/11.03.00_60/tr_121905v110300p.pdf

5. Even “Small” Installations, Modifications, and Collocations Can Raise Significant Safety Issues

One of the most important purposes of local zoning and review is to protect the safety of the public. In our experience, local zoning and review processes address public safety in many ways, from reviewing the completeness of the technical proposal to verifying that appropriate load analysis was done and confirming that setback requirements create a clear “fall zone” for a structure within a lot.

Our experience is that public safety is frequently a shared priority of the locality and the applicant. But we have seen situations in which the locality has identified public safety problems that would not otherwise have been addressed by the tower owner or carrier, and the locality has used the local zoning process to ensure that new or existing deployments do not create safety hazards. Even “small” installations and modifications of those installations through replacement, removal, or collocation of transmission equipment can create significant safety risks that are often addressed through the local process.

Savannah, Georgia, for example, is adjacent to a military base and extensive wetlands. Military aircraft and helicopters fly at low altitudes for mosquito abatement, emergency and rescue services, and training. These flight levels are frequently below the levels addressed by FAA rules. The city has taken two steps: 1) working with owners of towers in excess of 100 feet to install lights and reflective tape, and 2) notifying the aviation community of the placement of temporary cells-on-wheels (COWS). But the city also places strict limits on the size of structures that can be placed on top of buildings—limits that the proposed rules could eliminate if applied without clarification.

From an engineering perspective, one obvious concern about the elimination of a review process for “minor modifications” of up to 20 feet is that it does not allow for a local review of increased safety hazards posed by the modification. If a structure is approved based on setback and lot size requirement for the structure’s current height, increasing the height by 20 feet will require a larger lot and more setback. It is important that there be a mechanism to stop a modification if it is not safe.

Adding 20 feet of antennas to a structure changes its wind loading and weight, as well. If, to begin with, the structure is only 20 feet tall with a single ring of antennas (Figure 19), this is a significant change, not a minor one, and local review is warranted to verify that the necessary structural modifications are made on the mounting structures and, potentially, the underlying building.

Figure 19: Small Building with Single Installation of Antennas



Another consideration is the placement of cabinets and vaults. Cabinets on poles may block sidewalks and create a hazard. Vaults are becoming an increasingly significant part of wireless deployment. Bellevue, Washington reports that carriers are placing vaults in parks and in the public rights-of-way, and that some are large enough to require building permits. Vaults often project 18 inches out of the ground and require a review to ensure their safe placement, as well as landscaping for aesthetics. Of course, setting aside the safety concerns associated with changes to the size of a vault, allowing a 20-foot vertical extension would defeat the purpose of the vault in the first place.

6. Siting Process: From Application to Approval

In our experience, several steps are required in a siting process to provide a thorough yet timely review and ensure adequate protection for the community. In the siting process that we coordinate for the government of Montgomery County, Maryland, for example, there are different levels of review depending on the applicant's need. The application review is coordinated by a committee including representatives of the department of transportation and public works, the public schools, the parks and planning commission, the water and sewer utility, the permitting department, the technology services department, the office of cable communications administration, and the office of management and budget. These members represent the land owners, land use agencies, and agencies with the needed expertise to review the applications.

The committee chair conducts the monthly public meetings and directs the work of the members and the contractors that support the process. Members review the applications and vote on the applications; they can approve, deny, or approve with conditions. The members make a recommendation based on engineering, zoning standards, appropriateness to meet the carrier's stated goals, and the impact on the community.

For a new structure the engineering review evaluates whether the structure can support the antennas, and whether the tower needs to be as tall as proposed. The staff reviews radio frequency (RF) contour maps and the results of drive tests, and visits the site to see the topology and the location. The staff evaluates the visual impact of the new tower and determines whether a stealth design, screening, or a lower height is appropriate. Note that the FCC's proposed rules could have a potentially dramatic impact on this process because the viability of stealth options, as noted above, depend on whether the stealth conditions are enforceable.

For a collocation application, the review is more streamlined. The zoning review determines whether the antenna placement is permitted, the plan review determines whether other antennas are planned for the site, the RF review determines whether there are conflicts with the proposed frequencies, and the structural/design review determines whether the structure can support the new antennas.

A local process may have other required reviews, such as environmental review both through County historic preservation staff or other bodies. In Montgomery County, the Board of Appeals provides relevant applications to the Rustic Roads Commission, which review and provide non-binding recommendations to the Board of appeals.

Different communities use different processes to streamline permitting. But in our experience what makes the process work is the ability to take into account the unique aspects of each installation, and devise conditions that control the initial installation, and subsequent modifications.

7. Avoiding Significant Delays and Increased Costs

In our years of experience, both in assisting localities in their review processes and in planning and deploying wireless infrastructure, we have seen instances of delays that drive up costs and push back schedules. One significant issue is the delay caused by incomplete or inaccurate applications. We have observed:

1. Information left blank or omitted—antenna cut sheets, structural analysis reports, purpose for collocation, vicinity map, RF propagation maps, listing of alternative structures that have been considered, FAA certification review, height of buildings, size of equipment sheds
2. Information entered incorrectly—inaccurate drawings, wrong antennas, wrong carriers, structural analysis showing the proposed structure failing, not including all existing antennas on structure, wrong property owner name, incomplete supporting RF map, incorrect RF map, structure shown in wrong location on RF map, conflicting information (such as different elevation on application form and on the plans)
3. Turnover on applicant team—three or four different individuals filing the same application over the lifetime of the application process

For example, in Montgomery County, Maryland, 62 applications for new or modified structures were submitted from July 2012 to June 2013. Of those, almost half were incomplete. The County needed to return 28 applications to the applicants, point out the missing or incorrect areas, and prompt the applicants to provide the correct information. The longest period between application and completion of review was 71 days for the incomplete applications, compared to 55 for the complete applications.

In our experience, wireless providers and localities both benefit from collaborative best practices that involve the carrier filing accurate, complete applications and then engaging in frequent discussions with the locality about future deployment plans and coordination.

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.

In the Matter of

Acceleration of Broadband Deployment by
Improving Wireless Facilities Siting Policies

Acceleration of Broadband Deployment:
Expanding the Reach and Reducing the Cost of
Broadband Deployment by Improving Policies
Regarding Public Rights of Way and Wireless
Facilities Siting

Amendment of Parts 1 and 17 of the Commission's
Rules Regarding Public Notice Procedures for
Processing Antenna Structure Registration Applications
for Certain Temporary Towers

2012 Biennial Review of
Telecommunications Regulations

WT Docket No. 13-238

WC Docket No. 11-59

RM-11688 (terminated)

WT Docket No. 13-32

DECLARATION OF JOSEPH MONACO

I, Joseph Monaco, declare as follows:

A. Background and Experience.

1. I have extensive experience implementing the National Environmental Policy Act (NEPA), the federal Endangered Species Act, the federal Clean Water Act, and other federal, state and local environmental regulations. I am a professional environmental planner who has been administering and/or providing consulting services pursuant to NEPA and the other aforementioned environmental regulations since 1987. My professional experience includes both private and public practice, having worked as a private consultant for over 20 years, and having served as a local agency Environmental Manager for six years.

2. In the course of my career, I have prepared or contributed to the preparation of hundreds of environmental studies in compliance with environmental regulations. I am thoroughly familiar with the substantive and procedural requirements of NEPA and regularly apply my knowledge of the regulations and interpretation of the law provided through various court decisions.
3. My educational background includes a bachelor's degree in Geography from the University of California at Los Angeles, and a Master's degree in City Planning from San Diego State University. I am a member of the American Institute of Certified Planners (AICP), the American Planning Association, and the Association of Environmental Professionals. I have participated in conferences and training sessions on environmental issues, including regulatory compliance.

B. The Proposed Rules.

4. In preparing this Declaration, I have reviewed the Notice of Proposed Rulemaking in this matter. I understand that the proposed rules implement Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012, 47 U.S.C. § 1455(a). Section 6409(a) states that “a state or local government may not deny, and shall approve” particular requests to collocate, remove or replace transmission equipment on an “existing wireless tower or base station” if the request would not “substantially change the physical dimensions of such tower or base station.” The FCC’s proposed rules define “substantially change” to effectively allow additions to existing towers of 20 feet vertically and horizontally, additions of cabinets and equipment shelters of any size (as long as no more than a certain number are added, as long as the excavation associated with the work is limited to the tower site and access and utility rights of way. The

proposed rules do not clearly state that states or localities can review the environmental impact of a proposed modification. I understand some in the industry are arguing that the law prevents any meaningful local review of a proposed modification.

5. The proposed rule considers a proposed modification as a “substantial change” and therefore subject to State and local review only if:
 - a. the proposed modification would increase the existing height of the support structure by more than 10%, or by the height of one additional antenna array with separation from the nearest existing antenna not to exceed twenty feet, whichever is greater, except that the proposed modification may exceed the size limits set forth in this paragraph if necessary to avoid interference with existing antennas; or
 - b. the proposed modification would involve the installation of more than the standard number of new equipment cabinets for the technology involved, not to exceed four, or more than one new equipment shelter; or
 - c. the proposed modification would involve adding an appurtenance to the body of the support structure that would protrude from the edge of the support structure more than twenty feet, or more than the width of the support structure at the level of the appurtenance, whichever is greater, except that the proposed modification may exceed the size limits set forth in this paragraph if necessary to shelter the antenna from inclement weather or to connect the antenna to the support structure via cable; or
 - d. the proposed modification would involve excavation outside the current structure site, defined as the current boundaries of the leased or owned property surrounding the structure and any access or utility easements currently related to the site.”

6. The Notice of Proposed Rulemaking addresses four major issues regarding the regulation of wireless facility siting and construction:
 - a. The Commission seeks comment on expediting its environmental review process, including review for effects on historic properties, in connection with proposed deployments of small cells, DAS, and other small-scale wireless technologies;
 - b. The Commission proposes to adopt a narrow exemption from the Commission's preconstruction environmental notification requirements for certain temporary towers
 - c. The Commission seeks comment on rules to clarify and implement the requirements of Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012 ("Spectrum Act").¹³ Under Section 6409(a), "a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station." Eligible facilities requests include collocation requests, as well as requests for removal or replacement of existing equipment, and;
 - d. The Commission seeks comment on whether to address certain disputes or questions that have arisen about how to apply its 2009 Declaratory Ruling in specific circumstances
7. The focus of my review was primarily on issues a) and c), specifically relating to how the proposed Rulemaking would modify procedures regarding how projects are reviewed, conditioned and approved with respect to environmental effects.

8. My analysis of the Notice of Proposed Rulemaking, in light of the requirements of NEPA and my experience with other relevant federal, state and local environmental regulations is as follows:
9. The Presence of an Existing Facility in an Environmentally Sensitive Area Should Not Lead to an Automatic or Standardized Finding that Modification of the Existing Facility Will Result in No Significant Effects. An existing facility that is situated within an environmentally sensitive area may compromise the integrity of the resource, but does not entirely negate the resource's value. In such cases, adding facilities, even those of small scale and scope, could have the potential for significant environmental effects, because of the intrinsic sensitivity of the resource. In such cases, any additional or cumulative effect on the resource could be adverse and significant. Therefore, quantitatively limiting the size, scope or scale of additional facilities would not avoid significant environmental effects in all cases. Minor additions to existing facilities could have significant effects even if only incremental to past disturbances.
10. Provided below are a few examples of such incremental and significant adverse effects from additions to existing facilities:

C. Threatened, Endangered and Sensitive Species:

11. Delhi Sands flower loving fly (*Rhaphiomidas terminates abdominalis*):
 - a. The Delhi Sands flower loving fly is a species listed by the federal government as endangered, with a highly restricted range that is confined to portions of Riverside and San Bernardino Counties of California. Virtually all known populations of the species occur in small, isolated habitat patches surrounded by incompatible urban land uses. Because this species has an affinity to habitats that coexist with urban

development, additions to existing development even on a minor or small scale can have significant impacts on this species due to the limitations on available habitat and the highly specialized nature of its habitat. In addition, all remaining habitat for the species has high value for development, due to its location within a highly urbanized landscape, resulting in increased pressures and challenges related to conservation efforts.

- b. The Recovery Plan for the species prepared by the U.S. Fish and Wildlife Service notes, “Due to the listing of the Delhi Sands flower-loving fly, most local jurisdictions require habitat assessment and, if necessary, Delhi Sands flower-loving fly presence/absence surveys prior to issuing grading permits for development projects. Thus, the uncontrolled destruction of known occupied Delhi Sands flower-loving fly habitat, as a result of development projects, is greatly diminished.”
- c. However, if local review and regulatory processes for the siting of proposed land uses, even small, incremental additions to existing facilities in predominately developed areas, is discontinued or disallowed, the current trend of impact minimization on the species could be reversed. Prohibition of local review for purposes of reasonable siting and design of additions to existing structures could interfere with conservation planning and recovery efforts that are being pursued at both the federal and local levels.

12. San Joaquin kit fox (*Vulpes macrotis mutica*):

- a. The San Joaquin kit fox is listed by the federal government as endangered, and receives additional protection through its endangered listing status by the State of California. A key element of kit fox survival is the ability to establish and maintain

dens for purposes of temperature regulation, protection from adverse weather and protection from predators. In the face of increased urbanization, the species often relies on degraded remnants of habitat within urbanized areas, including man-made structures for den establishment. Kit foxes have been known to use sheltered areas of existing structures, and dens have been found under the porches and foundations of residential and commercial buildings, and other structures offering suitable shelter. These practices have made conservation and recovery of the species particularly problematic. However, local government planning efforts have long taken these issues into consideration, and local governments have worked closely with federal agencies to carefully develop planning and regulatory programs to address the unique needs of the species. In this instance, local expertise, and planning techniques have been proven to be successful in implementing conservation actions for the species, in a way that is more effective than federal regulatory processes alone.

- b. Removing local discretion from the process of siting and design of additions to existing structures could result in significant effects on the San Joaquin kit fox by reducing or eliminating suitable habitat. As an example, uninformed siting practices might favor concealing new equipment within portions of existing structures for visual shielding, without consideration of whether the selected location could provide suitable habitat for the kit fox, resulting in adverse effects on the species. Alternatively, consultation with local experts would afford the opportunity to avoid impacts through simple practices, such as siting in open areas, above-ground

locations, or other portions of a structure that could provide feasible and practical solutions, without additional costs or time for processing building plans.

D. Sensitive Habitats:

13. Vernal Pools: Vernal pools are seasonally flooded depressions found on soils with an impermeable layer such as a hardpan, claypan, or volcanic basalt. The impermeable layer allows the pools to retain water much longer than the surrounding upland areas. However, the pools are shallow enough to dry through evaporation, and may fill and empty several times during the rainy season. This unique cycle of wetting and drying, coupled with the nature of the soils typically associated with vernal pools result in highly specialized plants and animals that are adapted to these conditions. But because of their rare and unique nature, vernal pools are considered to be extremely sensitive to both physical disturbance and water quality issues. As such, there is not a category of activities considered to have de minimis impacts on vernal pools, in cases where physical encroachment into a pool or watershed area of a pool is involved. Any impact would typically be considered significant, and therefore establishing quantitative limits on the size, scope or extent of activities, even if they involve additions to existing facilities, could have significant and adverse effects.

E. Conservation Planning:

14. The U.S. Fish and Wildlife Service is the lead federal agency in implementing and enforcing the federal Endangered Species Act (ESA). The Service encourages local agencies, land owners and organizations with land use regulatory authority to prepare regional Habitat Conservation Plans (HCPs). HCPs are authorized under Section 10(a) of the ESA as a means to address “take” of listed threatened, and endangered species.

Regional HCPs typically take a broad, landscape approach to species conservation planning, and are the mechanism that the Service uses to issue permits that essentially delegate federal authority over the take of listed species for large areas over an extended period of time. These plans are designed and intended to advance species and habitat conservation objectives in ways that benefit national interests in conservation and recovery of threatened and endangered species, through locally-initiated and implemented planning efforts. Benefits cited by the Service for local agencies to pursue and implement regional HCPs include: local control, certainty in project planning, assurances from the federal agencies, funding opportunities, permit streamlining, and public participation. Benefits for species conservation include: better reserve design, larger blocks of undisturbed habitat, coordinated management of reserve lands, and an ecosystem-based approach to conservation.

15. Regional HCPs typically include a variety of responsibilities that are placed on local agencies for implementing and enforcing the conditions of the permit. Restricting or eliminating local control of activities would otherwise be within the purview of an agency responsible for implementing a regional HCP could impede the ability of local agencies to achieve the goals set forth under the HCP. Actions that would side-step and potentially compromise local HCP planning efforts could not only affect the resources that are directly impacted by the facilities, but could compromise the overall conservation strategy of the regional plan. This could in turn lead to loss of coverage of certain species, and/or revocation of the take permits issued by the Service, thereby invalidating the HCPs, and creating a disincentive for future planning by public and private participants.

F. Even Small Changes to a Facility Can Have Significant Environmental Effects Depending on the Location and Affected Resources.

16. Environmental review and consideration involves a critical intersection of policy and science. The concept of “thresholds” or “tipping points” are often used to draw a distinction between an effect that is considered “significant” or not, and are often used as triggers for enhanced scrutiny and evaluation processes. In addition, tipping points are often used as quantitative threshold for requiring a specific permit or regulatory authorization. However, important to how such thresholds are developed and applied are the environmental circumstances within which the project is considered. In determining whether an effect is “significant”, NEPA requires consideration of both context and intensity. Context means that the significance of an action must be analyzed in several contexts such as society as a whole, the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For example, in the case of a site-specific action, significance would usually depend upon the effects in the specific location rather than in the world as a whole. Intensity refers to the severity of impact, based on a variety of factors that may include:
- a. The degree to which the proposed action affects public health or safety
 - b. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas
 - c. The degree to which the effects on the quality of the human environment are likely to be highly controversial
 - d. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks

- e. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration
 - f. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts
 - g. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources
 - h. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act
 - i. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment
17. Earlier I noted and provided examples of situations where even the smallest change could result in a significant effect, based on the intrinsic sensitivity of a particular resource. Here the focus is on how the change is viewed in light of environmental circumstances, and how the combination of project characteristics and environmental conditions contribute to a finding of significance for environmental effects. Needless to say, the process of determining significance or a tipping point at which an otherwise insignificant impact would rise to the level of significance is complex, and requires careful thought

and consideration of a number of variables, as well as application of discretion by the evaluator.

18. Applying a blanket, irrefutable and non-discretionary process to a class of activities that could clearly have the potential for significant impacts on the environment would be imprudent. NEPA of course provides for categorical exclusions to streamline the process for consideration of activities that are likely not to have significant effects. But NEPA provides a backstop, by tasking the lead federal agency with the obligation to consider whether a particular activity, under particular circumstances could push an impact beyond a tipping point, despite the fact that it falls within a category of activities that in most cases, would not. Removing that backstop at the federal level, and simultaneously eliminating local review and authority over similar processes of checks and balances conflicts with the basic principles of environmental protection, at both the local and federal level.

G. Changes In Facilities Can Have Ripple Effects on Support Infrastructure Required to Support the Facility

19. The proposed rule effectively exempts from environmental review and consideration modifications that would involve excavation, as long as the excavation is within “the current boundaries of the leased or owned property surrounding the structure and any access or utility easements currently related to the site.” The presumption appears to be that areas within an existing right-of-way, ownership or lease area is already disturbed by development of the existing facility, and therefore devoid of any environmental resource value. As demonstrated earlier in my comments, I state and proved examples of how this is clearly not the case in all circumstances. Environmental resources are not defined by lease, ownership and/or right-of-way boundaries, and can exist within these areas. In

many cases, environmentally sensitive resources or areas occupy portions of utility rights-of-way. I have routinely seen instances where rights-of-way co-exist with wetlands, vernal pools, and sensitive upland habitat, including those that support listed and/or sensitive species. Therefore, allowing excavation within existing rights of-way, could have significant adverse impacts, and could otherwise interfere with regulations put in place to avoid or mitigate environmental effects. In addition to biological resources, local control over structure height, setbacks, bulk and scale, and other aspects of siting and design provides public benefits with regard to safety, environmental health, and aesthetic resources. In addition to the effects of the physical placement of facilities on existing structures, such additions could affect adjacent properties, and conflict with community-based standards that protect public health and safety. Establishing absolute standards that do not consider context, and preclude local consideration of context could frustrate well designed and established plans for controlled development. In this respect, the portions of the Commission rules that treat excavation and other construction activities on a site or in rights of way as “insignificant” as long as the modification to the wireless tower meets certain numeric standards are not well-considered – unless, of course, the FCC makes it clear that states and localities can conditions these activities.

H. Conclusion

20. I assert that certain environmental conditions create circumstances where any change or modification would have the potential for a significant effect. I further assert that even seemingly minor actions can result in significant effects, when the combination of environmental sensitivity and project characteristics could result in adverse consequences. Moreover, left unchecked, even minor changes could result in unintended

consequences that, left unexamined, could have adverse direct and indirect effects. Under the proposed rules, state, local and tribal review of impacts on environmentally and culturally sensitive areas would be arguably prohibited. If that were to happen, in combination with the elimination of Commission-level review of facilities in environmentally sensitive areas, without some process as a backstop or safety net to provide meaningful analysis of effects, it would conflict with and frustrate the intent of NEPA, and other federal, state and local regulations that have been set in place for decades to afford protection to the environment.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief, and that this declaration was executed on February 3, 2014, at Encinitas, California.

A handwritten signature in black ink, appearing to read 'J Monaco', written over a horizontal line.

Joseph Monaco